

EVALUATION OPTIONS FOR MEDICAID

Prepared under the direction of
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for Planning and Evaluation
and
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Health Care Financing Administration

Department of Health and Human Services
Health Care Financing Administration
Office of Research and Demonstrations

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Urban Systems Research and Engineering, Inc.
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The statements and conclusions contained in this report are those of Urban Systems Research and Engineering, Inc. and SysteMetrics, Inc. and do not necessarily reflect the views of the United States Department of Health and Human Services. The contractors assume responsibility for the accuracy and completeness of the information contained in this report.

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Preface

This study was conceived by the Office of the Assistant Secretary for Planning and Evaluation (ASPE) and the Division of Beneficiary Studies, Office of Research and Demonstrations, Health Care Financing Administration (DBS/ORD/HCFHA) to further the development of an evaluation plan for the Medicaid program which is responsive to the needs of policymakers. The Government project officers were John Heinberg of the Office of Evaluation and Technical Analysis in ASPE and Gerald Adler of the Program Evaluation Group of ORD/HCFHA's Division of Beneficiary Studies.

The report draws heavily on a series of interviews conducted with individuals knowledgeable about and involved in Medicaid decision-making at both State and national levels. The project is indebted to them for the information and insights they so generously provided.

The project also thanks those members of the Department of Health and Human Services staff who served on the Work Group which met regularly to guide the project, including Edward Neuschler (HCFHA), Deborah Lewis-Idema (ASPE), David Cooper (ASPE), Sherry Terrell (HCFHA), Allen Dobson (HCFHA), and Jeff Buck (ASPE). James Bell also served on the Work Group in the role of technical consultant. The Work Group was a valuable source of information and guidance on what proved to be a very complex subject.

For USR&E, Marilyn Rymer served as the Project Director and Karen Quigley was the Project Manager. They conducted the majority of the interviews, identified and described the key program issues, and developed the evaluation study options. James Lubalin, Embry Howell, Doris Soderberg, and Donald Zimmerman of Systemetrics performed the review of HCFHA data bases and assisted in the analysis of their utility for Medicaid program evaluation. Barbara Mawn was the Project Secretary.

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EVALUATION OPTIONS FOR MEDICAID

EXECUTIVE SUMMARY

Background

This report represents the initial step in the development of an evaluation plan for the Medicaid program. The study had three objectives:

- to identify key program issues, primarily through discussions with Medicaid policymakers,
- to assess the utility of HCFA data bases to address the issues, and
- to recommend an evaluation strategy for consideration by the Office of the Assistant Secretary for Planning and Evaluation (ASPE) and by HCFA's Division of Beneficiary Studies of the Office of Research and Demonstrations (DBS/ORD/HCFA).

A program which is changing as rapidly as Medicaid, and which is under as many constraints, places severe demands on both policy analysts and evaluators. The former are called upon to answer the "what if" questions; the latter are asked both to report the results of current and past program policies and to design evaluation systems for new policies. The focus of this report is on evaluation activities.

The policy context of the program is largely that created by the Omnibus Budget Reconciliation Act (OBRA) of 1981, which opened major areas of flexibility for the States, many of which offer new opportunities for cost savings. Since the interviews with policymakers were largely completed in January 1982 -- before the President's New Federalism proposal was announced -- the present division of responsibilities between State and Federal governments is assumed. However, the issues that emerged are so fundamental that they are judged likely to remain key evaluation concerns, however the program is structured in the future.

Methodology

Four major tasks were undertaken in this study:

- An initial review of Medicaid literature, legislation, hearings and previous evaluation reports was undertaken with particular attention to the legislative changes enacted in 1981.
- Personal interviews were conducted with approximately 40 individuals identified as having a perspective on and potential need for Medicaid program evaluation data. Those interviewed included senior staff from each of the DHHS divisions involved in Medicaid decision making, OMB, each of the Congressional Committees responsible for Medicaid, the Congressional Budget Office, and a variety of nongovernment organizations involved with the program. Interviews were conducted with State officials in California and Illinois as well as with the National Governors' Association and the American Public Welfare Association. Interviewees were questioned about their perceptions of recent changes to the Medicaid program and likely future policy concerns, their needs for information, and the evaluation studies that might be conducted. Interview responses were then analyzed to identify the issues of concern to policymakers and to determine which of these required evaluation attention.
- An assessment was completed of the strengths and weaknesses of eleven selected HCFA Medicaid data bases and of their utility for Medicaid evaluation purposes.
- Evaluation study options were developed which address key issues identified during the interviews. Available sources of data were assessed to see how required data could best be obtained. Finally, a set of short and long-term study options were developed for each issue. Special emphasis was given to the short-term options since evaluation results are needed quickly to be of assistance in determining Medicaid policy changes.

Evaluation Issues and Options

Of the various topics suggested by the interviews, nine were selected by the study team as being most important and most amenable to study. The description of each issue area is followed by a brief indication of short and long-term evaluation strategies. The distinction between short and long-term studies is between those

which could be completed within eighteen months and those which are likely to take longer.

1. Home and community-based care waivers. This program, established on an experimental basis by Section 2176 of the OBRA, allows States to expand Medicaid coverage to include a wide variety of health and social services when they are provided in the community to those who would otherwise require institutional care. Its purpose is to explore the potential of home and community-based care to prevent or delay institutionalization and therefore to provide more cost-effective long-term care.

Short-Term: A) A short-term evaluation describing State response to the waiver provision and evaluating the cost and impact of home and community-based care services provided. B) Case studies of selected State waiver programs in order to provide home and community-based care program design information to States.

Long-Term: A) A long-term evaluation to determine the cost impact of State waiver programs in this area. B) A special tracking study to determine add-on and substitution effects, i.e., the extent to which home and community-based care waiver programs have been used to supplement other services, private effort, or compensate for Federal cutbacks in States utilizing Titles III and XX of the Social Security Act.

2. Inpatient hospital reimbursement. The OBRA also freed States from the requirement that inpatient hospital reimbursement be cost based. States may instead, generally speaking, utilize any reimbursement methodology as long as it results in rates that are "reasonable and adequate...for efficiently and economically operated providers...." The strongest interest in evaluation work in this area was shown by Federal agency staff and by States. They want to know how States respond to their new options and whether the changes made result in any decrease in Medicaid expenditures.

Short-Term: A short-term evaluation describing State response to the OBRA changes in hospital reimbursement requirements and evaluating the fiscal impact.

Long-Term: A) A long-term evaluation to determine the impact of changes in State inpatient hospital reimbursement methodologies resulting from OBRA on

expenditures, utilization, and provider participation.
B) Case studies of hospital reimbursement programs in selected States to determine the impact of changes and to better understand reimbursement methodologies.

3. Freedom of choice waivers. Section 2175 of the OBRA amended Medicaid law to allow States (within certain limits) to require recipients to obtain their care through certain providers and to allow States to limit provider participation to those providers who operate effectively and efficiently. It is anticipated that a wide variety of contracting mechanisms and arrangements will evolve as States implement this waiver provision. Federal agency staff are interested in the rate at which successful new delivery models are adopted by States and the possible benefits of mandating the adoption of such models at the Federal level. States want to know how to go about developing delivery models and criteria of effective and efficient service delivery.

Short-Term: A descriptive assessment of State response to the waiver provisions in this area.

Long-Term: A) An evaluation to assess the impact of waiver programs restricting recipients to efficient and effective providers. B) An evaluation to assess the impact of waiver programs for case management and specialty physician arrangements.

4. Copayment. Currently, States have limited authority under Federal Medicaid law to impose copayment requirements on services and populations. There is a great deal of interest at both State and Federal levels in expanding this authority. Policymakers are interested in information on the impact of copayments on utilization, on the degree of substitution of one service for another, on the net savings and long-term health status changes likely to result from copayments, on the differential impact of copayments on various eligibility groups, and on the impact of various levels of copayment.

Short-Term: A literature review of copayment experience and the development of a research design for evaluation of the impact of copayments for the categorically needy population and for mandatory services.

Long-Term: An evaluation of the impact of requiring copayments for categorically needy populations and mandatory services.

5. Family responsibility. Current Federal Medicaid law severely limits the extent to which family members can be required to contribute to the support of Medicaid recipients. There is a great deal of interest at both State and Federal levels in allowing States to establish family responsibility programs. The administration's FY 1983 budget proposal includes a provision which allows States to require adult children of Medicaid recipients to contribute to the cost of their parents' care. There is interest at the Federal level in examining the history of family responsibility programs and in gathering data which could help to indicate the amount of revenue a program could expect to achieve. States are also interested in identifying program design options and possible implementation problems.

Short-Term: A historical review of family responsibility requirements in States and development of options for the design and implementation of family responsibility policy options.

Long-Term: An assessment of likely savings from various family responsibility policy options.

6. Eligibility. There are many areas of Federal and State decision making regarding Medicaid eligibility. Each of these is being scrutinized as policymakers seek to bring program costs under control. Strong interest was expressed by Congressional and Federal agency staffs in obtaining more and better data on State eligibility policy decisions and analysis of the effects of these decisions on the size and characteristics of the Medicaid population and program expenditures. Their primary interest is in information which would help them understand the net impacts of possible Federal and State changes in optional group coverage, income and resource levels, allowable income disregards, work expenses and accounting periods.

Short-Term: Development of better data on the relationship between eligibility criteria and program costs and a survey of State and local health programs for the non-Medicaid poor.

7. Comparisons of the institutionalized and non-institutionalized Medicaid populations. On a per capita basis, institutionalized Medicaid recipients are unquestionably the most expensive group within the Medicaid program, yet very little is known about exactly who they are or the range of services they utilize. There is

currently no separate breakout of Federal data on the personal characteristics or on the utilization and expenditure patterns of institutionalized versus non-institutionalized Medicaid recipients, although there is growing interest in comparative analysis of these groups.

Short-Term: Development of better data describing the institutionalized and comparing their utilization and expenditure patterns to those of other Medicaid recipients.

8. Dual Entitlees. Given the size and growth rates of both the Medicaid and Medicare programs, policymakers have both strong incentives to cut back both programs and many options on how cutbacks could be achieved. A recurring problem in assessing what the impact of policy changes might be involves the lack of data on the dual entitlee population.

Currently the Medicaid and Medicare programs each issue totally separate routine data reports with no means to merge information from both reports so that analysis can be done of the characteristics of and total expenditures on dual entitlees. Such analysis is of interest because Medicaid generally supplements Medicare coverage of health care services. Thus, Medicare cutbacks are likely to result in greater Medicaid costs. Another reason for combining the costs of both programs is to obtain a more complete picture of the overall costs of publicly financed health care for the poor elderly and disabled populations.

Short-Term: Development of better data on overall utilization and cost patterns of dual entitlees.

Long-Term: Development of detailed data on overall utilization and cost patterns of Medicare and Medicaid dual entitlees.

9. Analysis of the range and distribution of Medicaid utilization and expenditures: Until recently only aggregate data have been available at the Federal level. This has limited researchers to using average rates by service as the statistical measure describing utilization and expenditures by the Medicaid population. However, there is evidence to indicate that these statistics may be very misleading, in that average Medicaid utilization and costs appear to be skewed by a significant number of high utilizers. There is therefore a great deal of interest in defining the distribution of use of services and expenditures across and within Medicaid eligibility groups.

Short-Term: Development of data on the distribution of utilization and expenditures across and within various groups of Medicaid recipients.

Data Bases

HCFA has been developing data sources over the past few years to more adequately respond to Medicaid program issues. One reason for undertaking an evaluation plan at this time is that several of these projects are nearing fruition. While HCFA data bases are likely to contain the information needed to respond to most evaluation issues, for some issues it will be necessary to turn to other data sources or to commission special studies. The following are some of the major components of the emerging HCFA Medicaid Data System:

1. Program Operating Data. The States provide HCFA with monthly and annual reports on utilization, enrollment, and expenditures. These reports, when compiled for all States, provide an aggregate data source.
2. Tape-to-Tape. Many States maintain automated administrative files based on the Medicaid Management Information System. A HCFA project is collecting data from State tapes and creating uniform person-based files.
3. Medicaid Quality Control. The primary purpose of quality control is the detection of errors, but a by-product is a data base on a sample of recipients which can be used for research and evaluation.
4. National Medical Care Utilization and Expenditure Survey. An in-depth survey of medical care use which includes intensive samples of Medicaid households in four major States.
5. Program Characteristics. Uniform data on State policies regarding eligibility, benefits, reimbursement, and administration were collected for February 1982. When linked to other sources, program characteristics data can be used to examine reasons for variations in utilization and cost.
6. Waiver Files. HCFA maintains records of State applications for waivers of Medicaid regulations. These are useful to describe innovations which may have consequences for the program as a whole.

7. Survey of Impaired Individuals in Households. A household survey focusing on the health status and functioning of impaired individuals who are potentially in need of institutional care.

The relationship between the issues identified and data resources is summarized in the exhibit which follows.

Other Evaluation Concerns Raised by Policymakers

In addition to specific issues needing evaluation attention, interviewees also expressed some more general thoughts and concerns about future Medicaid evaluation work. In particular, policymakers stressed the need for Medicaid evaluation work to be more relevant, more timely, and more decision-oriented. They suggested the following guidelines to maximize the utility of evaluation results:

- Establish ongoing mechanisms to maintain communication with policymakers
- Implement joint planning and review of evaluation agendas and priorities
- Develop flexible data bases
- Maximize ease of access to data
- Release findings in conjunction with the budget planning cycle
- Use interim reports and briefings to increase the use of evaluation results in policy development
- Develop study products and reports more oriented to the needs of decision makers.

Wherever possible, these recommendations have been incorporated into the study options presented in the report.

Next Steps

This report lays out a range of short-term and long-term evaluation projects which relates to issues of concern to policymakers. It is expected that DBS staff and other HCFA and ASPE officials will formulate formal short and long-term evaluation plans based on the issues presented in this report, consideration of other priorities, and the availability of resources. These plans, once developed, should be widely disseminated and should be reviewed and

RECOMMENDED DATA BASE USE FOR SHORT-TERM AND LONG-TERM
EVALUATION OPTIONS ON KEY MEDICAID ISSUES

ISSUE	Program Operating Data (HCFA 120 and 2082)	Person-based MMIS Data from Quality Control Sample	Person-based Data from State MMIS (Tape-to-Tape)	Person-based Survey Data on Utilization, Expenditures, and Health Status (NMQUES)	Survey of Impaired Individuals	Data on State Medicaid Program Characteristics	Waiver Files and Reports	MGA and IGHP Reports	Short-term Supplementary Data	Long-Term Supplementary Data
1. Home and Community-Based Care Services Waiver Program	X				X	X	X	X	State telephone survey; literature review; site visit to States	Survey to establish special unit record data base; State telephone survey
2. In-Patient Hospital Reimbursement	X		X		X	X	X	X	State telephone survey	Case studies
3. Freedom of Choice Waivers	X		X		X	X			State telephone survey	State survey
4. Copayments	X		X		X				Literature review; Research design development	
5. Family Responsibility									State telephone/mail survey; Development of implementa- tion models	Survey of relatives
6. Eligibility	X	X	X		X			X	State telephone/mail survey	
7. Institutionalized Recipients		X	X		X			X		
8. Dual Entitlees	X			X						Additional Medicare data to Tape-to-Tape
9. Distributional Analysis	X				X			X		

updated frequently to attain the goal of conducting policy-related evaluation. From the discussion conducted with policymakers, it is clear that the audience for such work is both large and receptive.

Organization of Report

This report presents the results of the study of evaluation options for Medicaid. Following the background material included in Chapter 1, Chapter 2 describes the method of selecting the nine issues which were determined to be of greatest concern to policymakers and the most appropriate for evaluation study. This is followed by a discussion of each issue, including the reasons for its identification as a key issue and the information policymakers need on the issue to assist them in their decision making. Finally, there is a review of the comments made by interviewees regarding evaluation work in the Medicaid program.

Chapter 3 summarizes eleven available data sources which can be utilized to design evaluation studies for the Medicaid program. The chief characteristics of each source are described, as are the strengths and weaknesses of the source for evaluation purposes. A separate volume of this report includes a detailed description of each source and a detailed assessment of its usefulness to evaluation efforts.

In Chapter 4, evaluation options are proposed for each of the nine Medicaid issues determined to be appropriate for the study. For each issue, the discussion begins with a review of the decisions likely to be faced by policymakers in that area. Next, evaluation questions are posed which elicit the information and analysis needed by policymakers to assist in their decision making. Then, available sources of information to answer the evaluation questions are assessed. The discussion for each issue concludes with study options for undertaking the needed research, both in the short-term and long-term.

Throughout this report, terms and acronyms are used which may be unfamiliar to some readers. Appendix B includes a glossary to assist in this regard.

Chapter 1

INTRODUCTION

The purpose of this report is to recommend evaluation activities for the Division of Beneficiary Studies (DBS) of ORD/HCFR which are responsive to the information needs of policymakers as they consider changes in the Medicaid program.

1.1 The Need for Information

The passage of the Medicaid program in 1965* marked an important commitment by the Federal and State governments to meeting the health care needs of poor people. While Medicaid retained the welfare orientation of earlier medical vendor payment programs, it substantially liberalized public medical assistance by extending the concepts of medical indigence, minimum standards of service, mandatory coverage groups, and freedom of choice for recipients in selecting providers. The underlying goal of the program, as commonly accepted at the program's beginning, was to ensure that the poor were brought into the mainstream of health care.

However, it did not take long for policymakers to recognize that the cost of the Medicaid program would exceed their expectations. By the early 1970's some retrenchment started to occur at the Federal level. A major program objective -- to require each State eventually to cover all services and groups of poor

*Public Law 89-97 (H.R. 6675). The "Social Security Amendments of 1965," approved July 30, 1965.

people -- was abandoned, and steps were undertaken to improve program management.

By the end of the decade, it became clear that more dramatic changes were needed to slow the cost spiral. The program growth rate averaged 16% annually between FY 1973 and FY 1979, in spite of several initiatives at both the Federal and State levels to bring costs under control, including but not limited to:

- The establishment of PSROs as utilization review mechanisms
- The development of a sophisticated Medicaid claims processing and management reporting mechanism (MMIS)
- The development of a wide variety of benefit limits and administrative review mechanisms at the State level
- The development of the Medicaid Quality Control (MQC) system to reduce payment of erroneous and fraudulent claims
- The development of the Maximum Allowable Cost (MAC) drug reimbursement regulations

In spite of these measures, cost containment continued to be an elusive goal for Medicaid. Not surprisingly then, when the Reagan Administration assumed office in 1981, reductions in Medicaid spending were seen as an important step in bringing the Federal budget under control. Two new thrusts in policy were quickly established. For the first time, the level of Federal Financial Participation - the Federal percentage of Medicaid dollars - in the program was cut. Second, a policy was adopted to restrict the regulatory role of the Federal government and to increase State flexibility in Medicaid program administration, with the assumption that States would move quickly and effectively to capitalize on cost containment opportunities. In short, the priorities of the Federal Government for Medicaid became budget cutting, deregulation, and the granting of flexibility to States. The legal embodiment of the new priorities was the 1981 Omnibus Budget Reconciliation Act (OBRA). The provisions of this act form the core of this evaluation plan.

Since Medicaid budget pressures continue to be immediate, still other Federal initiatives for Medicaid were included in the President's FY 1983 budget, presented to the Congress in January 1982. The budget proposal contained a number of recommended changes to Medicaid which continued the themes of reduced Federal expenditures (reduction in Federal Financial Participation for optional services), incentives to States for cost reduction (cap on administrative expenditures), and increased State flexibility (freedom to apply copayments to mandatory services for the categorically needy and to establish family responsibility programs).

But the most dramatic proposal for change in Medicaid is without doubt the Reagan Administration's New Federalism proposal. This initiative -- the general principles of which were announced in the 1982 State of the Union Address -- is sweeping. For FY 1984 and beyond, the New Federalism calls for a major reorganization of responsibility for various Federal-State programs. It calls for explicitly distinguishing Federal from State and local responsibilities and for the transfer of revenue resources to the States as Federally funded activities again become the responsibility of States and localities.

A major purpose of the initiative is to create clear responsibilities for programs now jointly administered or financed by several levels of government. Under the Administration's original plan, States and localities would assume full responsibility for public assistance programs for the non-elderly, non-disabled population. In return, the Federal Government would accept full responsibility for the Medicaid program that finances medical care for the poor. The Administration felt that this swap will result in substantial administrative efficiencies as States would be able to design income support programs for the poor in accordance with local needs, and the Federal government would be required to establish measures that would reduce the very rapid cost

increases for the Medicaid program that have taken place since its inception.

Since the proposal was made, several Task Forces have been convened within DHHS to define the specific changes which would take place in each of the various programs affected and to draft the required legislation. Because of the implications of the proposal for all levels of government, the process of defining program changes and drafting legislation has included a series of negotiations with the States. As of the preparation of this report, the initiative is still in the developmental stage.

Whatever Medicaid's future course, it seems inevitable that the program is poised on the brink of significant policy changes. And, as policymakers debate the options open to them, research and evaluation findings can play a pivotal role in the policy process. Now, more than ever, information is needed on the range of current State Medicaid practices, the degree of dependence of the various groups on the Medicaid programs, and the impact of any given change on the population at risk.

1.2 Objectives of the Study

The primary study purpose has been to assist ORD/HCFAs' Division of Beneficiary Studies in the preparation of an evaluation plan for the Medicaid program which directly relates to the issues policymakers are likely to be confronting in the next few years. Evaluation is only worthwhile if it is useful to management or policymakers in their decisionmaking. Thus, a major objective of the study has been to determine the policy areas in which choices are likely to be made and to ascertain what program information and research analysis might shed light on the debate.

A second objective of this study has been to identify how both previously existing and newly available HCFA Medicaid data bases can best be used to provide analytic support to the policy process. Anyone familiar with the Medicaid program is no doubt aware that

until recently the lack of timely and detailed data on program operations has been a continuing problem at the Federal level. For a program costing over \$30 billion annually, surprisingly little information has been collected and distributed to policymakers in a useful form. Many decisions have had to be made without basic data, much less extensive analysis. HCFA has taken steps to change this situation. Several new data bases have been developed to provide information on the characteristics and performance of the State programs. In addition to the routinely reported aggregate data, data being collected now also include unit record data from State Medicaid Management Information Systems, sample data from the National Medicaid Quality Control system, interview data from the National Medical Care Utilization and Expenditure Survey, and data on State program characteristics. For each of the key issues facing policymakers, this report indicates which of these HCFA data bases have the greatest potential for relevant and timely analysis.

A third objective of this study has been to identify short-term as well as long-term evaluation strategies for key issues. Many issues facing the Medicaid program cannot await the results of technically precise but elaborate and lengthy research. There is a need to utilize research techniques and approaches which emphasize quick turnaround as well. Several such approaches have been developed and are in use at various agencies, such as the service delivery assessment methodology developed by the Inspector General's office, which is being used both by HHS and by the Department of Education as an information gathering device, and the use of task orders to perform short term policy evaluations and evaluability assessments, which ASPE has found can reduce turnaround time on such studies to eight months or less. These approaches tend to rely less on fixed data systems and relatively more on purposive surveys. It is important that these approaches be adapted and used within ORD/HCFA to provide a quick turnaround capability on Medicaid research and evaluation questions. The short-term evaluation

options developed as part of this study propose the use of some innovative techniques to achieve this goal.

To summarize, this study aimed to identify key program issues and related evaluation needs, assess the availability of the data required to respond to those evaluation needs, and recommend an evaluation strategy which both utilized available data and employed innovative techniques to obtain other required data on a timely basis.

1.3 Assumptions

Several operating assumptions have guided the development of this report. The first of these is that this study does not attempt to develop a comprehensive evaluation plan for the Medicaid program. It deals only with parts of the program -- individual policy areas or population groups or a particular program aspect. It is not at this time seen as possible or productive to recommend a global evaluation approach. Decisions within the program are generally not made on a program-wide basis, but tend to focus on a particular issue or group. It was judged most appropriate to design an evaluation program which would support this more focused decision-making.

Second, this study does not make final recommendations concerning the HCFA research and evaluation agenda for the coming years. The intent of this report is to lay out for HCFA a "menu" of short-term and long-term evaluation projects which relate to issues of concern to policymakers. This report was written primarily for those involved in making Medicaid-related decisions concerning resource allocations and the research agendas within HCFA and ASPE. It is designed to offer information on the research that is needed by policymakers and the data that are available or required to meet that need. It is anticipated that this information will be used by HCFA and ASPE officials to allocate resources and to develop a formal evaluation plan which will focus on meeting the needs of policymakers within the constraints of resources allocated to

Medicaid evaluation. There are, of course, other audiences for this report. These include the States, which are largely dependent on the Federal government for any cross-state evaluation activity; other Medicaid researchers, who wish to influence or complement Federal evaluation efforts; and Medicaid policymakers themselves, who are concerned about obtaining reliable and relevant information. This document will serve as a stimulus for discussion for all of these groups. However, it is seen primarily as an internal planning document and as an input to the development of a formal evaluation plan.

Third, it was assumed that researchers would be dealing with the program more or less as it currently exists; that is, a Federal-State program with at least the current degree of cross-state variation. This assumption was dictated by the great uncertainty surrounding both the specifics of the proposed federalized Medicaid program and the likelihood of its enactment. There is no way to predict at this time the characteristics of the program which will result from the New Federalism initiative or what the important issues related to such a program would be. It does seem likely, however, that regardless of how the program changes in terms of structure or administration, many of the basic issues will remain the same -- who should be eligible, what services should they receive, how much should they and their families contribute to the cost of care, on what basis should vendors be reimbursed, and so on.

Fourth, it was assumed that HCFA research dollars would continue to be severely constrained. Thus, no new major data collection efforts are recommended. Instead, every attempt is made to exploit the various Medicaid data bases currently available or under development. There are several reasons for this. One is that construction of new data bases is expensive. Another is that construction of new data bases is time-consuming and the most urgent need of policymakers, especially in key issue areas, is to obtain data quickly, even at the cost of some loss of accuracy. But probably the most important reason is that the HCFA data bases,

especially the new ones, appear quite promising for evaluation work. This does not mean that there are no other useful data sources or that additional data collection was not recommended where appropriate. There are in fact several other data sources which may be of great use in evaluation work. These are reviewed in more detail in Chapter 4. For areas for which there is no existing data, original data collection is recommended. However, whenever possible the report emphasizes the use of previously existing or newly available HCFA bases or the use of innovative, relatively low-cost approaches to obtaining data (such as brief surveys, case studies, or piggybacking on other efforts) rather than the establishment of new reporting systems and fixed data bases.

A fifth and final assumption was to consider only evaluation activities congruent with DBS' function and role within ORD/HCFA. Recommendation of demonstration projects, for example, was not considered.

1.4 Study Methodology

The study of evaluation options for Medicaid began in October 1981 and was carried out by contractors supervised by project officers from ASPE and ORD/HCFA. The project was guided by a Work Group composed of DHHS staff knowledgeable about and involved in Medicaid policymaking and evaluation, assisted by a technical consultant on program evaluation. The Work Group's role was to participate in the planning of all tasks and to review drafts of all protocols and products to ensure that the project was achieving its objectives.

The project consisted of four tasks. Task 1 was an initial review of literature, legislation, hearings, and previous evaluation reports on the Medicaid program. This review was undertaken to understand the Medicaid policymaking process and to identify key policymaking positions. Emphasis was also given to analyzing the objectives of the program and how they have evolved over the years, with particular attention to the legislative changes enacted in 1981.

In Task 2 personal interviews were conducted with approximately 40 individuals identified by the Work Group as persons with a perspective on and potential need for Medicaid program evaluation data. They were questioned about their perceptions of significant recent changes to the Medicaid program and future policy concerns, their needs for information, and their ideas for program evaluation issues. Exhibit 1 is a listing of the individuals interviewed. As the exhibit indicates, individuals in a wide range of policy-related positions participated in the study. Senior staff from each of the major DHHS divisions involved in Medicaid decision-making were included, as were staff from OMB, each of the Congressional committees dealing with Medicaid, the Congressional Budget office, the Congressional Research Office, and representatives from various non-governmental organizations with a strong interest in Medicaid policy. On-site interviews were conducted in California and Illinois with State Medicaid program staff. In addition to the two States interviewed directly, staff from the organizations representing States (the National Governor's Association and the American Public Welfare Association) were interviewed.

Although the protocol varied somewhat for different interviews, key questions asked of each respondent were:

- What are the current major Federal policy changes?
- What do you anticipate will be the impact of these changes?
- What issues do you see as key in the coming years?
- What research/evaluation questions are you likely to be asking in developing and tracking these issues?*
- What data are most needed?

*A copy of the interview guide used with Federal respondents is included in Appendix A.

INTERVIEWEES BY CLASSIFICATION

<u>Administration Officials</u>	<u>Federal Agency Budget/OMB Staff</u>	<u>Congressional Staff</u>	
Robert Rubin, M.D. Assistant Secretary of Planning and Evaluation ASPE/DHHS	Peter Bousein Director, Bureau of Program Policy HCFA/DHHS	Sheila Burke Majority Staff Senate Finance Committee	Rick Curtis National Governor's Association
James Scott Director, Office of Legislation and Policy HCFA/DHHS	Lynn Etheredge Chief of Health Branch OMB	Karen Nelson Majority Staff Subcommittee on Health and Environment	Beverlee Myers Director, Department of Health Services State of California
Richard Teske Director, Office of Intergovernmental Affairs HCFA/DHHS	Ellen Wormser Director, Division of Health Budget Analysis ASMB/DHHS	House Energy and Commerce Committee	Herbert Cohen Department of Health Services State of California
	Kevin Sexton	Lou Bradnell Majority Staff Subcommittee on Health and Long Term Care	Gordon Rude Senate Office of Research State of California
<u>Federal Agency Policy Staff</u>	Director, Office of Management and Budget HCFA/DHHS	House Select Committee on Aging	Steve Thompson
Edward Neuchstler Director, Division of Medicaid and Long Term Care Policy OIP/HCFA/DHHS	<u>Research/Evaluation</u>	Robert Hoyer Minority Staff Senate Finance Committee	Office of the Speaker of the Assembly State of California
William Hickman Director, Division of Operations BPO/HCFA/DHHS	Donald Muse Chief, Medicaid Program Data Branch ORD/HCFA/DHHS	<u>Non-government</u>	Ron Tom Subcommittee on Medi-Cal Reform State of California
Robert Wren Director, Division of Medical Services Coverage Policy BPP/HCFA/DHHS	Paul Ginsberg Congressional Budget Office	Gary Capistrant American Health Care Association	Susan Ewing-Ramsey Division of Medical Programs Illinois Department of Public Aid
Deborah Lewis-Idema Director for Health Care Financing Policy Analysis ASPE/DHHS	Jennifer O'Sullivan Congressional Research Service Library of Congress	Sara Rosenbaum Children's Defense Fund	Steve Dunn Research Economist Division of Medical Programs Illinois Department of Public Aid
David Cooper Analyst Health Care Financing Policy Analysis ASPE/DHHS	Kay Reiss Congressional Research Service Library of Congress	<u>State/State Association</u>	Gail Momeny, William Hall, Kurt DeWeiss Staff, Illinois Legislature
Maureen Baltay Director for Long Term Care Policy ASPE/DHHS	Steve Long, Ph.D. Associate Professor Syracuse University	Larry Bartlett National Governor's Association	Robert Clark Director, Bureau of Planning Evaluation Illinois Department of Public Aid
	Ron Anderson, Ph.D. Professor University of Chicago	Richard Merritt Director, Intergovernmental Health Policy Project George Washington University	
		Richard Jensen American Public Welfare Association	

Interview responses were analyzed at the conclusion of Task 2 to determine the issues of concern to policymakers which might benefit from evaluation study.

Task 3, performed concurrently with Task 2, consisted of an assessment of available sources of Medicaid program information. Eleven major data bases were reviewed:

- Annual aggregate statistical reporting on form HCFA 2082
- Monthly aggregate statistical reporting on form HCFA 120
- National Medicaid Data Base from the Medicaid Quality Control System
- Medicare/Medicaid Data Book
- National Unit Record Medicaid Data Base derived from State MMIS
- National Medical Care Utilization and Expenditure Survey
- Medicaid Program Characteristics Data System Study
- Catalogue of State Medicaid Program Changes
- Recent or Proposed Changes in State Medicaid Programs: A Fifty-State Survey
- Survey of Impaired Individuals in Households
- Waiver Files and Reports

Task 4 involved the development of evaluation study options for the Medicaid program. These studies are designed to answer questions related to key issues identified during the interview phase of the study. For each issue, the information needs of policymakers are identified, as are the management or policy decisions likely to be affected by evaluative analysis. Available sources of data (as identified in Task 3) are assessed for each issue to determine which data base would best provide needed information. Finally, for each issue a study design is included which describes evaluation activities to be undertaken in the short-term and/or long-term to meet the information and evaluation needs of policymakers.

1.5 Organization of Report

This report presents the results of the study of evaluation options for Medicaid. Following the background material included in this chapter, Chapter 2 describes the method of selecting the nine issues which were determined to be of greatest concern to policymakers and the most appropriate for evaluation study. This is followed by a discussion of each issue, including the reasons for its identification as a key issue and the information policymakers need on the issue to assist them in their decisionmaking. Finally, there is a review of the comments made by interviewees regarding evaluation work in the Medicaid program.

Chapter 3 summarizes eleven available data sources which can be utilized to design evaluation studies for the Medicaid program. The chief characteristics of each source are described, as are the strengths and weaknesses of the source for evaluation purposes. A separate volume of this report includes a detailed description of each source and a detailed assessment of its usefulness to evaluation efforts.

In Chapter 4, evaluation options are proposed for each of the nine Medicaid issues determined to be appropriate for the study. For each issue, the discussion begins with a review of the decisions likely to be faced by policymakers in that area. Next, evaluation questions are posed which elicit the information and analysis needed by policymakers to assist in their decisionmaking. Then, available sources of information to answer the evaluation questions are assessed. The discussion for each issue concludes with study options for undertaking the needed research, both in the short-term and long-term.

Throughout this report, terms and acronyms are used which may be unfamiliar to some readers. Appendix B includes a glossary to assist in this regard.

Chapter 2

IDENTIFICATION OF EVALUATION ISSUES

A major task of the study of Medicaid evaluation options was to identify the issues policymakers believe will be important in the coming years and will require evaluation work. As noted in the methodology description in Chapter 1, the interview questions centered on identifying current major Federal policy changes, key future policy concerns, and research and evaluation questions following from those policy changes and concerns.

Nine issues were chosen from those raised as ones for which evaluation work was both appropriate and important. This chapter briefly reviews this selection process. However, it is primarily devoted to a detailed discussion of each of the nine issues, including a brief history of the issue, the groups expressing interest in it, and the nature of their interest. The interviews also elicited some general guidance from policymakers on the type of evaluation work needed for the Medicaid program. These comments are summarized in the final section of this chapter.

2.1 Identification of Evaluation Issues

The nine issues selected for evaluation attention are:

- Home and community based care waivers
- Inpatient hospital reimbursement
- Freedom of choice waivers
- Copayments
- Family responsibility
- Eligibility

- Comparison of the institutionalized and non-institutionalized Medicaid populations
- Medicare and Medicaid dual entitlees
- The range and distribution of Medicaid utilization and expenditures across the recipient population

While many more issues are likely to be faced by Congress and the Administration in deciding the future course of the Medicaid program, these issues are among the most critical. Further, they met five important considerations: there was great breadth and strength of interest in the issue, particularly at the Federal level; substantive evaluation questions on the issue were identified; there was a consensus that there are decisions pending in the issue area; evaluation results are likely to play a part in decision-making; and the data necessary for evaluation for the most part are available or are able to be generated on a timely basis. In summary, evaluation findings in these areas are expected to be of assistance to policymakers as they decide how to provide medical care to the poor in the face of severe budgetary constraints.

2.1.1 Range of Issues Raised by Policymakers

Exhibit 2 presents a summary of major policy changes and key future issues raised by policymakers during the interview process. The issues range from the very narrow and specific, such as family responsibility, to broad program goals, such as recipient access to care and quality of care. The breadth of issues reflects both the scope and complexity of the Medicaid program and the variety of roles and responsibilities of the persons interviewed. Some of the issues also reflect basic philosophical questions being raised regarding the appropriate roles for Federal and State governments in the administration and financing of the program.

In reviewing the issues, two facts should be kept in mind. The first fact is that President Reagan's New Federalism proposal became public only toward the end of the period when interviews were being conducted. Most respondents did not appear to be aware of the possible shift in program administration then under review in the

Exhibit 2

POTENTIAL EVALUATION ISSUES: RECENT MAJOR POLICY CHANGES
AND KEY FUTURE POLICY CONCERNS IDENTIFIED IN INTERVIEWS

ISSUES	Administration Officials	Policy Staff	OMB Staff	Research/Evaluation Staff	Congressional Staff	Non-Government	State/State Association Staff
Hospital Reimbursement		X	X	X			X
Nursing Home Reimbursement		X	X				X
Eligibility	X	X	X	X	X	X	X
Home and Community Based Care Waivers	X	X	X		X		X
Freedom of Choice Waivers		X	X	X	X		X
Competition; Block Grants; Vouchers	X	X	X	X		X	X
Co-Payments		X	X	X	X	X	X
Federal/State Role in Medicaid	X	X	X		X		X
Federal Financial Participation		X	X				X
Relative Responsibility		X	X	X	X		X
Dual Entitlees (Medicare/Medicaid)	X				X	X	
Cost-Shifting		X			X	X	
Status of Public General Hospitals	X		X				
Recipient Access to Care	X	X	X	X	X	X	X
Quality of Care		X		X	X		
Deregulation	X	X		X	X		X
Management Concerns*	X	X		X	X		X

* Includes third party liability, fraud and abuse, Medicaid quality control, reporting requirements, and penalties.

X = Direct expressions of strong interest in the topics were made during the interviews by one or more of the individuals within that category of interviewees.

White House; therefore, most issues were raised in the context of the current Federal-State administrative structure for Medicaid, with an emphasis on increased State flexibility and less Federal involvement. As stated previously, this assumption applies throughout this report. It is possible that the issues deemed important at this time might be different as a result of the New Federalism proposal. More probable, however, is that the fundamental issues will remain largely the same, regardless of who has ultimate responsibility for the program.

The second fact is that all of the interviews took place in an atmosphere of deep concern over the cost of the Medicaid program, based both on the general rate of increase in medical care prices and on the large and growing cost of long term care. The concerns over cost, and particularly the cost of long term care, were so pervasive that most interviewees tended to treat them as givens and to use them as a backdrop for the discussion rather than cite them specifically as key issues. However, it was very clear that all Medicaid policies are being evaluated in terms of their cost-saving impact and that long term care is the area of most concern.

The conclusions one can draw from examining Exhibit 2 are the following:

- The issues in which the greatest across the board interest was shown are:
 - eligibility
 - competition, block grant and vouchers
 - copayments
 - access to care
- In addition, there is significant across the board interest at the Federal level (defining Federal to include Administration officials and agency and Congressional staff) in:
 - hospital reimbursement
 - home and community based care waivers
 - freedom of choice waivers
 - Federal-State roles in Medicaid
 - family responsibility
 - management concerns
 - deregulation

In addition to these policy areas of interest, there was also a strong interest in "more, better, quicker data." For many interviewees, especially policy and OMB staff, it was difficult to predict the particular issues or questions which will become important. They want assistance in building their capacity to respond to rapidly emerging issues; specifically, they need disaggregated data which they can manipulate to address a range of policy concerns. Three breakouts of data which they indicated would be particularly useful are:

- Information on institutionalized versus non-institutionalized Medicaid recipients
- Information on Medicare and Medicaid dual entitlements, and
- Information on the range and distribution of utilization and costs across the Medicaid population

All of these data provide information on populations of special interest. Distributional data are key to identifying the incidence of high utilizers among the Medicaid population, a group which is of great interest because of the perceived potential for achieving substantial cost savings through more effective management of their care.

2.1.2 Selection of Evaluation Issues

In selecting the issues which seemed appropriate for evaluation attention, the project team first reviewed the issues raised during the course of the interviews against a set of considerations which had been developed.

These considerations, which were used as guidelines to help identify a tentative list of topics for evaluation attention, included:

- The breadth and strength of interest in the issue, particularly at the Federal level. Many of the interviewees were interested in only one or two issues because of their particular interests or responsibilities. Relatively more importance was assigned to issues seen as key by a number of individuals with a variety of perspectives. There was no weighting of responses by individuals; however, particular

attention was paid to the responses of Federal policymakers as a class, because Federal policymakers are the main audience for Federal-level evaluation work. Federally funded research is, of course, of utility to the States especially in the area of cross-state comparisons, where Federal research is the only source of data. It is also of utility to researchers and interest groups. However, the main focus of this report is on meeting the needs of Federal policymakers.

- Identification of policy-relevant research and evaluation questions. Interviewees were requested to list what evaluation questions were being asked in regard to a particular issue. The presence of substantive questions was considered important in the selection of issues for evaluation attention.
- Consensus that there are decisions pending in the issue area. One of the stated goals of this project is to increase the policy-responsiveness of the Division of Beneficiary Studies. The clearest measure of their responsiveness is the availability to policymakers of data relevant to pending decisions. Therefore, a priority was placed on work in those areas in which decisions are likely to be made at the national level in the foreseeable future.
- Appropriateness of issue for evaluation effort. The answers to many questions can only be solved by political negotiation or statement of a philosophical or managerial preference. Issues were not recommended for selection if it appeared that research and evaluation results were not likely to play a part in decision making.
- Likelihood of data availability. Although some issues met all of the above criteria, it was clear that the data to answer the research and evaluation questions were either not available (not present in any existing or ongoing data base) or could not be generated in time to contribute to the pending decisions (for example, required a primary data collection effort within the framework of a longitudinal study, or could not be captured by any currently developed methodology or indicators). Quality of care is the best example of the latter. The feasibility and cost of obtaining the required data was measured against the benefits to be derived from the evaluation findings in considering whether to recommend the issue for selection.

The project team used these considerations to select a group of issues which were tentatively recommended to the work group as being appropriate for evaluation attention. The Work Group then reviewed

the recommended issues at length and after extensive discussion a final group of issues was decided upon.

2.2 Discussion of Issues Selected for Evaluation Study

Of the seventeen issues identified in the interview process, six were selected as topics for evaluation attention by the Division of Beneficiary Studies. These are:

- Home and community based care waivers
- Inpatient hospital reimbursement
- Freedom of choice waivers
- Copayments
- Family responsibility
- Eligibility

In addition, three issues are included which relate to the needs of policymakers for better data:

- Comparison of the institutionalized and non-institutionalized Medicaid populations
- Medicare and Medicaid dual entitlements
- Distributional analysis of Medicaid utilization and expenditures

The next section of this report will review each of these issues in detail and will include a brief history of the issue, the identity of the groups expressing interest in it, and the nature of their interest.

2.2.1 Home and Community Based Care Waivers

Home and community based care is a broad term used to describe a variety of services designed to support an individual living in the community. The importance of home and community based care lies in its potential to prevent or delay institutionalization and therefore provide more cost effective long term care -- assuming that care in the community is cheaper than institutional care. Maintenance care for the frail elderly, chronically ill, and disabled population represents a large portion of Medicaid expenditures and is currently for the most part provided in institutions. In 1979, Medicaid long term care expenditures

totalled \$7.8 billion. Of this amount, \$7.2 billion (92%) was spent for skilled nursing and intermediate care facilities while only \$0.6 billion (8%) was spent on home health and other care. This imbalance in the site of care is caused partly by an institutional bias in the Medicaid eligibility process and partly by the unavailability of alternative services.

It has been estimated that from 10% to 40% of the current nursing home population does not need full-time, residential care.* Congress believes that "many elderly, disabled and chronically ill persons live in institutions not for medical reasons, but because of the paucity of health and social services in their communities, and their inability to pay for those services or to have them covered by Medicaid when they do exist."**

The Home and Community Based Care Waiver program, created by Section 2176 of the OBRA is supposed to reduce institutionalization by (1) requiring States to carefully screen all potential recipients of institutional care to ensure that they require that level of care, and (2) allowing States to expand Medicaid coverage of community based services to include a wide variety of health and social services and to vary the service package by geographic area.

The program is based on the following assumptions:

- That a screening program can be developed and implemented which will effectively identify those who require a nursing home level of care.

*Baltay, Maureen, "Long-Term Care for the Elderly and Disabled," Congressional Budget Office, February, 1977; Larton, M. Powell, "Distribution and Alternatives for Older People, Health and Social Work, 3(2), 1978.

**House Energy and Commerce Committee Report on Medicare and Medicaid Provisions of H.R. 3982 "Omnibus Reconciliation Act of 1981" as reported, June 19, 1981. Budget Committee Report, No. 97-158, pp. 262-287.

- That given an option, individuals will choose to stay in the community.
- That community based services will be cheaper on an average per capita basis than institutional services.
- That community based care will help to support and maintain family involvement in the care of the elderly.

The specific provisions of the OBRA related to home and community based care are as follows:

- States may offer, under a Secretarial waiver, an array of home and community based services that an individual may need to avoid institutionalization, as long as the State:
 - Gives assurances that safeguards have been taken to protect the health and welfare of recipients (including adequate standards for provider participation).
 - Provides objective methods for evaluating each recipient's need for a skilled nursing facility (SNF) or an intermediate care facility (ICF). Services under the waiver may only be furnished to those who would otherwise require institutionalization. The method must utilize statutory definitions of SNF and ICF level of care.
 - Provides recipients with an informed choice as to which services to receive (except in the case where the cost of community services will exceed the cost of SNF or ICF care).
 - Gives assurances that the average per capita expenditure will not exceed the expenditure that would be incurred if the services were not available.
 - Provides data annually on the impact of the waiver on the type and amount of services provided and on the health and welfare of beneficiaries.
- The State may request a waiver of statewideness and comparability of services to offer, in a given geographic area, a package of services to both the medically and categorically needy that is not available elsewhere in the State.
- Services may include case management, homemaker services, home health aide services, personal care services, rehabilitation services, respite care services and other services approved by the Secretary.

Analysis of the interviews shows a great deal of interest in the development and impact of this program at both the Federal and State level. Congressional and agency staff are interested in and are under pressure to reduce the cost of caring for the elderly population; it appears that community based care may offer a mechanism which does so. However, there is also a great deal of skepticism about whether a community care program can be successfully restricted to those who would otherwise be institutionalized; that is, function as a substitute rather than an additional service. There is some fear that services will ultimately be received by a great many individuals who would not otherwise be institutionalized, raising overall costs to greater levels than would have been experienced in the absence of a community program. Part of the Federal skepticism stems from the possibility that States may see home and community-based care as a way to re-fund under Title XIX services whose funding was reduced under the Social Services Block Grant program.

Federal policymakers have as their primary interest the per capita cost effectiveness of community-based care, the effectiveness of screening programs, and the impact of the program on the number of persons institutionalized and on aggregate long term care expenditures. They are also interested in which States have used the waiver program and for what reasons, what the utilization and mix of services is for various populations, and whether the quality of care is adequate.

States share these concerns regarding the effectiveness and cost-impact of the program, and in addition face a variety of operational decisions. They wish to obtain information on program design options, likely implementation problems, the design of effective assessment and screening programs, case management techniques, and the recruitment and fiscal management of community based providers.

2.2.2 Inpatient hospital reimbursement

Reimbursement for inpatient hospital services is an issue of major importance because of the high percentage of Medicaid expenditures which it represents and because of certain changes which were made in States' options in this area by the OBRA.

Payments for inpatient services in general hospitals represent the second largest Medicaid benefit expenditure nationally, surpassed only by the combined cost of skilled nursing and intermediate care facilities (including those for the mentally retarded). In 1979, Medicaid general hospital inpatient services expenditures totalled \$5.6 billion, 27.6% of total Medicaid expenditures. Over the six year period from 1973-1979, they increased by an average of almost \$0.5 billion per year, an average annual compound rate of growth of 12.9%. Further, they increased faster than was explained by the combined 1.2% annual compound rate of growth in the number of recipients and the 9.7% annual compound rate of growth in the medical component of the Consumer Price Index during the same period.

To help bring hospital costs under control, the OBRA granted the States new flexibility in the establishment of inpatient hospital reimbursement methodologies, with the expectation that innovative programs would be developed to reduce expenditures in this area. States were freed from the requirement that inpatient hospital reimbursement be cost-based, a requirement which has long been regarded as allowing, if not exacerbating, the extraordinary escalation of hospital costs. The new legislation and implementing regulations (42CFR 447.252) require instead that:

- (1) The Medicaid agency must pay for inpatient hospital services and long-term care facility services through the use of rates that are reasonable and adequate to meet the costs that must be incurred by efficiently and economically operated providers to provide services in conformity with applicable State and Federal laws, regulations, and quality and safety standards.

- (2) The payment rates used by the Medicaid agency must be determined in accordance with methods and standards developed by the agency.

(3) With respect to inpatient hospital services -

(i) The methods and standards used to determine payment rates must take into account the situation of hospitals which serve a disproportionate number of low income patients with special needs;

(ii) The methods and standards used to determine payment rates must provide that reimbursement for hospital patients receiving services at an inappropriate level of care under conditions similar to those described in section 1861(v)(1)(G) of the Act will be made at lower rates, reflecting the level of care actually received, in a manner consistent with section 1861(v)(1)(G); and

(iii) The payment rates for such services must be adequate to assure that recipients have reasonable access, taking into account geographic location and reasonable travel time, to inpatient hospital services of adequate quality.

Approval of State hospital reimbursement methodologies by DHHS will be based on assurances by the States rather than by detailed review of State submissions, the past practice.

Analysis of the interviews shows that because of the financial importance of this issue, the recent legislative changes affecting it, and the proposed Federalization of the Medicaid program, policymakers are interested in following what happens with Medicaid hospital reimbursement within and among States. The strongest interest is shown by Federal agency staff and by States. Their primary interest is in knowing how States respond to their new options with regard to hospital reimbursement and whether changes result in any decrease in Medicaid expenditures. They are also interested in potential adverse second and third order effects of reimbursement methodology changes, such as:

- Reduction in access of recipients to care of adequate quality,
- Decreases in provider participation,
- Negative impact on hospitals with disproportionate numbers of low income patients, and
- Shifting of costs to charge paying payors.

Finally, policymakers are interested in analyzing the impact of such factors as rate setting commissions and a State's historical position with regard to providers and recipients on the

reimbursement methodology chosen, expenditures and access of recipients to care. The agency staff sees the information as crucial to their ability to forecast expenditures accurately, assess the need for and probable success of new Federal initiatives in hospital reimbursement, and determine whether Congressional mandates are being met by States. States require the information to assist them in identifying reimbursement methodologies which are feasible and effective.

2.2.3 Freedom of Choice Waivers

Prior to the enactment of the 1981 OBRA, Title XIX of the Social Security Act contained the following provision (1902 (a) (23)):

A State plan for medical assistance must...except in the case of Puerto Rico, the Virgin Islands, and Guam, provide that any individual eligible for medical assistance (including drugs) may obtain such assistance from any institution, agency, community pharmacy or person, qualified to perform the service of services required (including an organization which provides such services, or arranges for their availability, on a prepayment basis), who undertakes to provide him such services;...

This provision guaranteed freedom of choice of provider to Medicaid recipients. The only time when this right could be limited was when a State applied to the Secretary for and received a Section 1115 waiver in order to demonstrate an innovative approach to the delivery and financing of services to Medicaid recipients. However, approval of such waivers is contingent upon development of a detailed research methodology and comprehensive evaluation.

The freedom of choice provision allowed recipients to determine not only where care would be obtained but how much care would be obtained. There has been much discussion and research on the cost of this to the program. While no definitive conclusions have been drawn, clear examples of overutilization and extensive use of high priced services have been identified, and it appears likely that the

program could achieve some savings by controlling either the site of care or the quantity of care purchased.

Section 2175 of the OBRA amended the Medicaid law to declare that States will not be found out of compliance with the freedom of choice requirement if they:

- 1) engage in bulk purchasing of laboratory services or medical devices;
- 2) restrict the providers from which a recipient found to be overutilizing services can receive care; or
- 3) restrict for a period of time the participation of providers found to be over-prescribing or providing care of inadequate quality.

In addition, and perhaps more importantly, Section 2175 authorized the Secretary to issue a waiver of the freedom of choice and other requirements to allow States:

- 1) to implement a case-management or a specialty physician services arrangement which restricts the provider from...whom an individual... can obtain primary care services...
- 2) to allow a locality to act as a central broker in assisting individuals in selecting among competing health plans...
- 3) to restrict the provider from (or through) whom an individual...can obtain services...if such restriction does not discriminate among classes of providers on grounds unrelated to their demonstrated effectiveness and efficiency in providing those services...

These provisions, taken together, are enormously significant. For the first time States are to be allowed (within limits) to require recipients to obtain their care through certain providers. For the first time, a State is free to use its purchasing power to act as a prudent buyer -- buying from those providers who operate effectively and efficiently. It is anticipated that a wide variety of contracting mechanisms and arrangements will evolve as this waiver provision is implemented.

There was broad interest shown by the interviewees in the impact of this provision, both in terms of potential cost savings and in terms of potential adverse impacts on utilization and health status.

Agency staff want to know what delivery models are developed and what criteria of effectiveness and efficiency are applied. Their primary interests are the rate at which successful models are adopted by States and the possible benefits of mandating the adoption of such models at the Federal level. They share with the Congressional staff a concern as to whether the safeguards written into the law and regulations are adequate to protect the rights of providers and recipients.

States want to know how to go about developing delivery models and criteria of effective and efficient service delivery. They are looking for information and assistance in designing cost effective programs and in promoting provider participation.

2.2.4 Copayment

Copayment, a system in which the recipient of services pays a portion of the cost directly to the vendor, is a controversial issue that is attracting a great deal of attention at both State and Federal levels. Many have argued that the traditional Medicaid "credit card" approach to the purchase of services promotes unnecessary utilization of medical care. Copayment is seen as a way to establish cost-consciousness on the part of the recipient and thereby to reduce utilization to the level of medical necessity. Copayment also, of course, generates direct savings in that government reimbursement for services is reduced by the amount of the copayment required.

Currently, the imposition of a copayment requirement is a State option within guidelines established by the Federal government. Federal law and regulations prohibit the imposition of a copayment on mandatory services provided to the categorically needy; they do

allow imposition of a copayment on optional services for the categorically needy. Copayments may be imposed on any services for the medically needy.

Federal regulations also prescribe limits on the amount of a copayment. Copayments for non-institutional services are limited to \$.50 for items costing \$10 or less; \$1.00 for items \$11 to \$25; \$2.00 for items \$26 to \$50; and \$3.00 for items \$51 or more. Copayment rates are limited to 5% of the State's payment for the service. For institutional services, the maximum copayment charge for each admission is limited to 50% of the State's payment for the first day of care.

Many States have imposed copayments under these regulations. In the summer of 1981, approximately 16 States had a copayment requirement on one or more services. Copayment was most often required on drugs, followed by dental services and eyeglasses.

The published research on the impact of copayments is sketchy and inconclusive, due to the number of confounding variables present and to questions which have been raised concerning the methodologies employed. However, there is some evidence to suggest that while both direct savings and decreases in utilization are achieved, the greatest utilization decreases may come in ambulatory and preventive care, which may be offset later on by increased use of institutional and acute care services.* There is also some evidence that copayments are not always collected.** Nonetheless, the

*Brian, E.W. and Gibbens, S. T. "California's Medi-Cal Copayment Experiment." Medical Care 12 (December 1974 Supplement): 1-301; Roemer, M.I.; Hopkins, C.E.; Carr, L.; and Gartside, G. "Copayments for Ambulatory Care: Penny Wise and Pound Foolish." Medical Care 13 (June 1975): 457-466.

**Hopkins, C.E.; Roemer, M.I.; Procter, D.M.; Gartside, F.; Lubitz, J.; Gardner, G.A.; and Moser, M. "Cost-Sharing and Prior-Authorization Effects on Medicaid Services in California: Part II." The Provider's Reactions," Medical Care 12 (August 1975): 643-647.

interviews indicated that obtaining a broader copayment authority was high on the States' legislative agendas. States are particularly interested in obtaining the freedom to impose copayments on mandatory services for the categorically needy.

The Administration's FY 1983 budget proposal contained a provision which calls for a Federally required minimum copayment of \$1 per visit from the categorically needy and a \$1.50 per visit copayment from the medically needy for physician, clinic, and hospital outpatient department services. Also, a \$1 and \$2 copayment per day would be required of the categorically and medically needy, respectively, for inpatient hospital services.

There is a great deal of interest on the part of all policymakers regarding research and evaluation findings on copayment programs. Congress wishes to have information which will assist in identifying the likely impact of the Administration's proposals. The agency staff and the States wish to obtain information to assist them in planning further State and Federal initiatives in cost-sharing. Their primary interest is in information on the impact of copayments on utilization, on the degree of substitution of one service for another, on the net savings and long term health status changes likely to result from copayments, on the differential impact of copayments on various eligibility groups, and on the impact of various levels of copayment.

Both Federal and State policymakers face a variety of decisions on copayments, and timely research and evaluation work in this area will be of great use.

2.2.5 Family Responsibility

Family responsibility is a concept which springs from the belief that families should retain some responsibility for the care of dependent family members. It is most often thought of as a requirement that adult children contribute some amount of money towards the support of their institutionalized parents; however, the concept has wide applicability and could also refer to the

responsibilities of parents for institutionalized children, of children for parents in any care setting (including home), or of a spouse for a institutionalized mate. Some States currently have family responsibility laws on their books and in fact had such programs in effect prior to the establishment of the Medicaid program. Since the implementation of the Medicaid programs, Federal law and regulation have taken precedence.

The Federal Medicaid eligibility rules treat each family unit individually and restrict the consideration of income and assets available to those of the potential recipient and spouse, even going so far as to consider a married couple as two case units once one member has been institutionalized for a month. Therefore, the income and assets of adult children, other adult family members, and in some cases spouses, are not considered in determining eligibility. Further, there is an absolute prohibition against requiring relatives to contribute towards the cost of care as a condition of eligibility.

States are currently pushing strongly to change Federal law to allow States to establish family responsibility programs, and Congress and the Administration, in line with their policy of granting States administrative flexibility, have been receptive. The Administration's FY 1983 budget proposal contains a provision which would allow States to require adult children of institutionalized Medicaid recipients to contribute to the cost of their parents' care. This is, however, still a very controversial issue in many quarters and there is also a great deal of skepticism as to whether such programs are administrable and whether significant amounts of recoverable revenue exist.

There is interest at the Federal level in examining the history of family responsibility programs and in summarizing available data which could help to indicate the amount of revenues a program could expect to achieve.

The States share the Federal interests and are also interested in issues of program design and implementation. Possible program

designs range from the simple voluntary program to very complex programs which tie in to tax and judicial systems. The States' primary interest is in knowing what the possible types of family responsibility programs are, what the necessary elements of each type of program are, what implementation problems can be expected, and what revenue expectations should be.

2.2.6 Eligibility

One of the most critical policy areas within Medicaid is eligibility. Probably no other area of Medicaid policy is as complex and as little understood. Part of the problem is that much of Medicaid eligibility policy is decided for cash assistance purposes. Thus, a perception has often existed that eligibility issues are not a Medicaid concern. However, understanding of the importance of eligibility to Medicaid is increasing. It is becoming recognized that Medicaid budgets are as affected by the size and composition of the eligible population as they are by increased utilization and medical prices.

Although States have considerable flexibility in deciding whom they will enroll in their Medicaid programs, much of Medicaid eligibility policy is decided by the Federal government. The Federal government defines what groups States are allowed to cover under Medicaid (mandating some and leaving others optional) and makes many of the policy decisions about financial criteria used in eligibility determination. For example, it mandates income disregards and work expense deductions for both the AFDC and SSI programs. It also sets several minimum and maximum constraints on allowable income and asset levels used in Medicaid eligibility determination. For the medically needy program, the Federal government requires that States implement spend-down provisions. It also issues regulations governing allowable eligibility and accounting periods for the various eligible groups.

In spite of the strong Federal role, eligibility for Medicaid is subject to enormous interstate differences. Two policy areas are

especially important in State decisionmaking about eligibility. First, States have to decide which groups of people they will include. By law, a State must cover all AFDC recipients. They do not have to cover all SSI recipients automatically, but most do. Probably the most significant eligibility decision a State makes is whether to cover the medically needy group. By including the medically needy, a State opens up Medicaid to categorically-related persons of any income level, assuming their medical bills are large enough and other criteria are met. States can also choose among several other optional coverage groups.

The second critical policy area that States have to decide upon is the financial criteria they will use in determining eligibility. Of particular importance are the income and liquid asset limits which are established. Again, this is an area of enormous flexibility. States are essentially free to set AFDC income levels wherever they want. Minimum SSI income levels are Federally-determined, but States are free to supplement them as they wish. The income levels used for the medically needy are tied to where States set their AFDC levels. Separate income levels can be used for the institutionalized, but there are Federal regulations limiting the maximum level that can be used.

A Federal ceiling determines the maximum allowable liquid asset levels for AFDC. States can set whatever limits they wish within that maximum. The Federal government sets the SSI asset levels. States can set medically needy asset levels wherever they wish, except that there are certain minimum requirements.

There are many additional eligibility-related decisions States make such as those related to accounting periods, length of eligibility, allowable living arrangements, relative responsibility provisions, and transfer of asset prohibitions, but the key State eligibility decisions relate to coverage groups and financial levels.

Thus, there are many areas of Federal and State decision making regarding Medicaid eligibility. Each of these areas is being seriously scrutinized as policy makers seek to bring program costs

under control. The OBRA contained several policy changes to address cost concerns. Most of these changes were designed to reduce the number of poor people eligible for Medicaid. For AFDC, Federal policies regarding allowable income disregards, work expenses, maximum asset levels, and accounting periods were made more restrictive. The medically needy and non-AFDC children groups have been considerably redefined to give States more flexibility. For the first time, States are able to limit coverage to sub-groups of these populations. The State may (within certain constraints) design different benefit packages for sub-groups of the medically needy population and vary treatment of income and resources by sub-groups.

Even more recently, the Administration's New Federalism proposal for Medicaid raised many eligibility related issues. Would there be an attempt to standardize Medicaid eligibility criteria across States, especially to standardize coverage groups and income levels? How would the Federal government address in a national program the vast interstate differences in eligibility provisions? The many decisions to be faced make obvious the extreme complexity of decision making in this policy area, and the need for information.

In many respects, many of the past policy decisions on Medicaid eligibility have been stabs in the dark. Surprisingly little is known about how specific eligibility policies affect enrollment and costs. Data and analysis relating eligibility practices to utilization and expenditure levels have only recently started to be available. However, even recently available data are at such an aggregated level that it is difficult to use them to the extent needed to guide the many decisions required to make eligibility policies.

Not surprisingly then, strong interest was expressed by Congressional and Federal agency staffs in obtaining more and better data on State eligibility policy decisions and analysis of the effects of these decisions on the size and characteristics of the Medicaid population and on program expenditures. Their primary

interest is in information which would help them understand the net impacts of Federal and State changes in optional group coverage, income and resource levels, allowable income disregards, work expenses and accounting periods. In particular, any data concerning the effectiveness of eligibility-related OBRA changes are sought.

Because of their concern over the health care needs of groups being eliminated from Medicaid coverage, Congressional and special interest group staff also want information on what health services are provided to poor people by State and local government entities. More information on non-Medicaid State and local health expenditures would be extremely helpful to guiding decisions on further cuts.

2.2.7 Issues Related to Information Needs

One of the chief complaints regarding Medicaid research is that the data published routinely on the program are in a highly aggregated form. The formats used for this aggregate reporting preclude policy makers from obtaining information on some groups in which they are especially interested. In particular, mention was made by several interview respondents of a need for information on institutionalized recipients, Medicare and Medicaid dual entitlements, and high and low utilizers of Medicaid services. The importance of each of these groups is discussed briefly below.

Institutionalized Recipients

On a per capita basis, institutionalized Medicaid recipients are unquestionably the most expensive group within the Medicaid program, yet very little is known about exactly who they are or the range of services they utilize. There is currently no separate breakout of Federal data on the personal characteristics or on the utilization and expenditure patterns of institutionalized versus non-institutionalized Medicaid recipients, although there is growing interest in comparative analysis of these groups. Current data show expenditures on institutional services per se, but the data are not

linked to data on the many other health care services also used by the institutional population; neither are there data describing the demographic and economic circumstances of this group of recipients.

Dual Entitlees

Given the size and growth rates of both the Medicaid and Medicare programs, policy makers have both strong incentives to cut back both programs and many options on how cutbacks could be achieved. A recurring problem in assessing what the impact of policy changes might be involves the lack of data on the dual entitlee population. Dual entitlees are those individuals eligible for both Medicare and Medicaid. They are primarily an over-65 population and constitute about 11% of the total elderly population (about 95% of the nation's aged population is enrolled in Medicare; about 12 % of aged and disabled Medicare enrollees are also covered by State Medicaid programs.*)

Currently the Medicaid and Medicare programs each issue totally separate routine data reports with no means to merge information from both reports so that analysis can be done of the characteristics and expenditures of dual entitlees. Such analysis is of interest because Medicaid generally supplements Medicare coverage of health care services. Thus, Medicare cutbacks are likely to result in greater Medicaid costs.

Another reason for combining the costs of both programs is to obtain a true picture of the overall costs of public health care for the poor elderly and disabled populations. The current separate reporting systems contribute to confusion over what the total Federal and State costs to provide health care to these two groups are.

*Muse, Donald N., and Sawyer, Darwin. "The Medicare and Medicaid Data Book, 1981." Department of Health and Human Services, Health Care Financing Administration, Office of Research and Demonstrations. April 1982. pp. 1-3.

Range and Distribution of Medicaid Utilization and Expenditures

The fact that for the most part only aggregate data have been available at the Federal level has limited researchers to using average utilization rates by service as the statistical measure describing utilization by the Medicaid population. However, there is evidence to indicate that these statistics may be very misleading, in that average Medicaid utilization appears to be skewed by a significant number of high utilizers. There is therefore a great deal of interest in defining the distribution of use of services across and within Medicaid eligibility groups.

The information would be used both to identify the high utilizers of a particular service and to examine their use of related services. For example, if a group of high utilizers of emergency room services was identified, one would want to examine their use of physician visits and hospital admissions to find out if the high utilization was part of an overall pattern or represented a substitution of one service for another. Data of this type could then be used by States to better define utilization review screens and/or to change benefit limits to better target Medicaid services.

2.3 Issues Not Selected

Some discussion of the issues not chosen for DBS evaluation efforts is warranted. Ten issues raised by policy makers in the course of interviews fall into this grouping. The reasons why they were not chosen are reviewed briefly below:

Nursing Home Reimbursement. This is an issue in which many States expressed an interest since the 1980 Omnibus Reconciliation Act (ORA) offered States some new flexibility in the setting of these rates. However, there was little interest expressed in this issue at the Federal level. This is somewhat surprising, since nursing home expenditures constitute a large portion of Medicaid expenditures and therefore a substantial Federal expenditure. Also, low nursing home reimbursement rates may be related to the large numbers of patients occupying expensive hospital beds because no nursing home placement is available (administrative stays). The explanation for low Federal interest at this time is probably due to two factors:

first, the change in nursing home reimbursement methodologies is not expected to be as dramatic as the change in hospital reimbursement methodologies since the States already had a fair amount of flexibility in this area. Second, it is hoped that home and community based care waiver programs will be a more cost-effective way than manipulation of nursing home rates to reduce administrative stays. If the home and community based care waiver programs do not achieve their objectives, it is likely that more Federal attention will be paid to nursing home rates and reimbursement methodologies at the Federal level.

Block Grants; Vouchers; Competition. These topics all address various funding and organizational models for the Medicaid program. At this point in time, it appears that there has not been sufficient thought given to how these mechanisms would be utilized within the Medicaid program to justify giving them a high priority for evaluation resources.

Federal-State Roles. Any discussion of what constitutes the appropriate State or Federal role in a program such as Medicaid is certain to have a strong philosophical component and any resolution of the discussion is likely to be arrived at politically. It is both difficult to conceptualize how one would approach evaluation work in this area and unlikely that the results of such work would significantly influence the decision making.

Rates of Federal Financial Participation. The issue of appropriate rates of Federal Financial Participation (FFP) is also one which must be addresssed through political channnels.

Cost Shifting and Status of Public General Hospitals. Discussion of these issues is included in the discussion of inpatient hospital reimbursement.

Access to Services and Quality of Care. Many of the interviewees at all levels, including the Federal level, saw access and quality of care as key overall goals of the Medicaid program and were concerned about the impact of specific policies (especially recent cost-cutting measures) on the ability of the program to achieve these goals. The project team decided that the best way to deal with these issues is to include them, where appropriate, as outcome measures in proposed evaluation studies. Therefore, these goals have not been included as issues per se, but may be included as outcome measures in the impact studies which are recommended.

Deregulation. The impact of deregulation is an issue of interest to several interviewees; however, the topic is not defined well enough to develop research or evaluation questions at this time. Further, it is the specific opinion of other interviewees that any deregulation is an indication that the Federal government should not be involved in an area; therefore, they would frown on any impact or evaluation work in an area being deregulated.

Management Concerns. Of the sub-topics listed under Management Concerns (such as fraud and abuse, Medicaid quality control and third party liability), none was mentioned by more than one or two interviewees. This issue did not have sufficient overall definition to meet the criteria of broad and strong interest.

The elimination of these issues from further consideration in this report does not reflect on their significance or relevance to current policy debates. Rather, it reflects the need for DBS to focus its severely limited resources most appropriately and cost-effectively. Over the long term, as the policy questions surrounding these issues become clearer and as data sources improve, these issues too may warrant evaluation attention.

2.4 Other Evaluation Concerns

In addition to the mention of issues needing evaluation attention, interviewees also expressed some more general thoughts and concerns about future Medicaid evaluation work. In particular, policymakers stressed the need for Medicaid evaluation work to be more relevant, more timely, and more decision-oriented.

In order to be relevant, evaluation work must focus on appropriate issues and questions. It was acknowledged that this is not an easy task, as the appropriateness of a given issue changes over time and new issues arise quickly.

There was a desire expressed, however, to maximize the utility of evaluation through emphasizing communication between researchers and policymakers and joint planning of evaluation agendas. Policymakers applauded this study as an example of one such effort but pointed out that it could report only on the issues relevant at

one point in time. They suggested that there should be an ongoing mechanism, staffed by both researchers and policymakers, to plan and review evaluation agendas and priorities.

Policymakers also requested that DBS continue to emphasize timely research results. They see timeliness as having two components: quick turnaround and appropriate timing with regard to decision points. Either or both of these may apply to the needs of a policymaker with regard to a given issue. They see the issue of quick turnaround as best addressed by the development of flexibility in data sources and ease of access to data. To date, most Medicaid data have been collected by the Federal government in aggregate form, severely limiting the amount of manipulation or type of analysis which is possible. Questions which require cutting across data categories cannot be answered; analysis which requires control for several variables cannot be performed. DBS is currently involved in the development of several person level data bases which policymakers see as essential to their ability to perform quick turnaround analysis. Policymakers also suggested that DBS begin to utilize data from sources other than fixed systems. Approaches such as focused telephone surveys of States and use of task orders to purchase short term studies offer excellent opportunities to obtain needed data and respond to policymakers on a timely basis. Ease of access refers both to the number of individuals able to access data bases and to the use of technology to facilitate access and manipulation. Policymakers approve of the development of public use data tapes and the computerization of Medicaid data bases (both underway) and see them as adding substantially to DBS's quick turnaround capability.

Appropriate timing with regard to decision points requires identification of the constituency to be served, knowledge of the decision cycles in government, and advance planning. The decision cycles in government revolve around the budget process. Within the Department of Health and Human Services, legislative and budget planning occurs at the agency level (HCFA, for example) from January

through May. The agency proposals go to the Secretary's Office in mid-June and the Secretary's proposals go to the Office of Management and Budget in mid-September. There is an extended period of negotiation between OMB and DHHS from September through December. The President's proposal goes to Congress in January, and the Congress reviews and debates it up to the point of final passage, with the most intense period of alternative proposal development generally occurring from March to May. Thus, there are demands for data from various groups from January of one year through June of the succeeding year, and beyond. In order to have the broadest utility, policymakers suggest that research findings be targeted for release in January, at the beginning of the cycle. However, given the fact that alternative proposals can be developed at any point, this is not an all or nothing proposition. Again, the key is ongoing communication and planning. One strong suggestion made for increasing the timeliness of evaluation work is the use of interim reports and briefings to alert policymakers to information which will be available in the near future.

A third request by policymakers is that DBS make its findings and recommendations more decision-oriented. The requirement that findings and recommendations be decision-oriented relates both to the phrasing of the research questions and to the form of presentation of results. Interviewees requested over and over that the results of evaluation be made more directly relevant to them. They would like to see more straightforward conclusions regarding policy implications of results. They requested that an effort be made to relate the research designs to decisions facing Federal and State policymakers. Greater use of executive summaries and special issue papers would also help. Lengthy technical and academically-oriented reports are fine for researchers, but are not the appropriate form for most policymakers. Here again, they suggested that the use of briefings would contribute to the understanding and use of evaluation work.

To summarize, then, policymakers suggested the following guidelines be used to maximize the utility of evaluation results:

- Establish ongoing mechanisms to maintain communication between policy makers and program evaluators
- Implement joint planning and review of research agendas and priorities
- Develop flexible data bases
- Maximize ease of access to data
- Release findings in conjunction with the budget planning cycle
- Use interim reports and briefings to increase the use of evaluation results in policy development
- Develop study products and reports more oriented to the needs of decision makers.

Wherever possible, these recommendations have been incorporated into the study options described for each issue in Chapter 4.

Chapter 3

SUMMARY DESCRIPTION AND ASSESSMENT OF AVAILABLE MEDICAID DATA SOURCES

This chapter provides a brief overview of the HCFA Medicaid data sources reviewed as part of Task 3. The major characteristics of each source are described, as are the categories of data they contain and their strengths and weaknesses in general. Chapter 4 contains more specific analysis of their utility in addressing the Medicaid issues selected as appropriate for evaluation study.

3.1 Brief Description of Sources Reviewed

In this project, the data sources subject to review were primarily those currently being maintained, funded or developed by the Division of Beneficiary Studies, Office of Research, Health Care Financing Administration, which has ongoing responsibility for descriptive and evaluative studies of the Medicaid program. Given the resources available for this project, it was felt that these existing data collection efforts could be most easily described and critiqued and were likely to be of use in short-term and long-term evaluations of this program.

A total of eleven HCFA-supported sources were reviewed. Six focus primarily on utilization and expenditure data, four focus principally on descriptive information about State Medicaid programs, and one, the Medicaid/Medicare Data Book, is largely a compilation of information gathered from some of the other ten sources.

Many useful files exist beyond those maintained by HCFA. They include Census data, Social Security Administration files (e.g., SDX) and many surveys and models developed by other DDHS components (e.g., the National Medical Care Expenditure Survey, the Survey of Institutionalized Persons, the AFDC and Health Care Financing models of ASPE, etc.). Unfortunately, study resources did not permit the project team to pursue all possible sources in depth. Such additional sources are mentioned in the discussion of specific evaluation issues in Chapter 4 only to the extent the project team was aware of them.

3.1.1 Utilization and Expenditure Data Sources

The following six data sources provide (or will provide) information on Medicaid utilization and expenditure patterns:

- The HCFA 2082, Annual Medicaid Statistics, are derived from annual state reports (since FY 1973) which aggregate data on (1) numbers of Medicaid recipients by aid categories, basis of eligibility, sex, age, and race, (2) expenditures for health care services paid during the report year by type and cost, and (3) deductibles and copayments for aged and disabled recipients. The HCFA 2082 (along with the monthly HCFA 120 report described next) is the basic source for aggregate national and State descriptive data on Medicaid. Data are largely comparable by fiscal year and by State and (with some changes in 1980) span a nine year period, thus allowing trend analysis.
- The HCFA 120, Monthly Statistical Report, aggregates data reported by all States on Medicaid payments by form of payment (vendor, premium, or "buy in"), by program (Title XIX or State only), on the type of service and amount, and on number of recipients, units of service, basis of eligibility and aid status of recipients. It further collects data on the number, basis of eligibility and aid status of enrollees, on recipient cost sharing, and on the time from service delivery to vendor payment.
- The Medicaid Quality Control (MQC) System National Medicaid Data Base is a trial program to see whether a person-based unit record database can be formulated from statistics routinely gathered as a part of the ongoing MQC System. The Regional Office sub-sample of the MQC sample will be used as a test to generate data on the Medicaid eligibility

of members of Medicaid cases in the sample. For each eligible, those data will include: the basis of eligibility, aid code, eligibility start date, most recent action, Medicare status, other third party coverage, size of household, income, assets, person identifier, birthdate, relationship to the case head, sex, race and eligibility status. When these individual, person-based eligibility data are linked with claims information for the individual, a person based unit record can be created. The MQC system has, however, not yet progressed to this stage.

- The Tape-to-Tape National Unit Record Medicaid Database is a prototype system to develop person-based unit-records from State paid claims, eligibility and provider files. The feasibility phase covers data for two years, 1980-1981, and five States -- California, New York, Michigan, Tennessee, and Georgia. State MMIS tapes will be acquired and used to develop: 1) State specific files containing all of the non-duplicative information from the State tapes, in standard coded form and format, and sorted and stored by individual Medicaid eligible, uniquely identified over time; 2) three 100% uniform national data files -- provider, eligibility and claims -- containing recoded and reformatted information from the State specific files; 3) special purpose research files, drawn from the 100% uniform files.
- The National Medical Care Utilization and Expenditure Survey (NMCUES) is a one-time, three component survey to gather information about people and their health care needs and services: (1) The National Household Survey component covered calendar year 1980 and included 5 panel interviews of 17,400 persons residing in 6000 randomly selected households, representing the civilian, non-institutionalized population of the U.S. It gathered data on personal characteristics, health status, health service utilization, health insurance coverage and health care expenditures for all household members. (2) The State Medicaid Household survey included four random samples of 1000 cases each, from the November 1979 Medicaid eligibility files of California, Michigan, Texas and New York. There were a total of 13,800 non-institutionalized Medicaid eligibles surveyed in those states. The same data were gathered as for the National Household component. (3) The Administrative Records component queried State Medicaid records for those in the National and State Household surveys for whom coverage was reported. For the National Survey, States were asked to report only 1980 eligibility periods and aid categories of the respondents, but for the

State Medicaid Surveys they were asked to provide complete eligibility, claims and provider records for all respondents. Medicare claims records were also collected for all who reported Medicare coverage in both samples.

- The Survey of Impaired Individuals in Households has two major components: a functional limitation screen to select a sample of individuals with activity limits and a single round of interviews with selected individuals or their representatives. The population to be sampled will be Medicare eligibles over 65 years of age. From an initial sample of 51,000 individuals, approximately 6,000 impaired but non-institutionalized individuals will be selected by the functional limitation screen, administered personally or by telephone. The screen is to identify: 1) limitations in the individual's ability to perform the activities of daily living and in performing instrumental activities such as housework and shopping, and 2) the presence of memory failures limiting essential activities. The selected group members will be interviewed once, during the summer of 1982, to determine their social, physical and mental functioning; the nature and extent, duration, behavioral consequences, and underlying causes of their functional limitations; the amount, nature and sources of assistance the sample member perceives as needed and/or receives; the costs of these services and who pays them; the membership in the family group in which the respondent resides; housing and neighborhood characteristics; respondent's employment record; self disclosures about health insurance coverage, total family income and assets and the ability of this income to contribute to the respondent's care.

3.1.2 Program Characteristics Data

The following four data sources provide (or will provide) information on the characteristics of state Medicaid program:*

- The Program Characteristics Database is a tool essential to Medicaid analysis. It includes a computerized file containing February 1982 program characteristics data

*One additional source -- State Plan and Amendment Files -- were considered for possible inclusion. However, the data proved so unreliable, incomplete and out-of-date as to render this source useless for analytical purposes.

regarding the eligibility, benefits, provider reimbursement, and state program administration requirements of each state in detailed, standard, coded, and easily retrievable form. Future plans call for limited historical data acquisition, annual program characteristics updates plus a data management system linking these data with a) routine statistical reports HCFA 2082, 120, 64, and 25; b) special data bases from tape-to-tape, MQC, and NMCUES, and c) demographic characteristics of each state.

- The Catalogue of State Program Changes is a product of the National Governors' Association's State Medicaid Program Information Center. It presents tables summarizing changes, proposed or made, in selected State Medicaid programs, coded by state, status, and date proposed or implemented. Six substantive chapters deal respectively with Benefit Packages, Utilization Controls, Reimbursements, Administration and Management, Eligibility, and Alternative Methods of Service Delivery/Program Management. Additionally, a synopsis is given of selected current State Administrative Methods, Utilization Controls, and Cost Sharing by Recipients. The first catalogue covers data for the period July 1978 to July 1981; it is intended to be updated quarterly.
- Recent and Proposed Changes in State Medicaid Programs: A Fifty State Survey was compiled by the Intergovernmental Health Policy Project by reviewing all State legislation affecting Medicaid policy, through telephone interviews with key State legislators and policy staff, and by reviews of NGA's Catalogue. The report includes "survey highlights," which lists the number of States which have considered or taken selected actions under the broad categories of Services, Eligibility, Reimbursement, and Management, and twenty-four pages of report proper, listing each state, and by state changes classified as: 1) policies affecting eligibility, benefits, and reimbursements, 2) improvements in administration and management, and 3) other strategies.
- HCFA Waiver Files containing specific waiver requests for experiments, demonstrations and pilot projects, together with full descriptions of the projects, are maintained by HCFA/ORD. Waiver requests have to be accompanied by substantial amounts of information including a clear and specific description of the purpose of the waiver, identification of the specific statutory requirements that must be waived, and an explanation of the expected cost effectiveness or efficiency of the program changes. For waivers that include home and community based services,

other information must also be given, including assurances that the State will provide information annually to the Secretary on the impact of the waiver. HCFA has developed a special report detailing the requesting States' estimates of beneficiaries to be covered and cost impacts of home and community based waivers (Section 2176, PL 97-35). It will be required as an attachment to the waiver request and annually thereafter for the life of the waiver.

3.1.3 Overall Summary Data

Finally, the following data source represents a synthesis of other available information:

- The Medicaid/Medicare Data Book is comprised of both Medicaid and Medicare information and statistics (our review was with the Medicaid aspects only). It consists of four chapters and five appendices, with both descriptive narrative and related statistical data. Key information covered includes: an overview of Medicare/Medicaid, their interrelationships and expenditures; public and private health care expenditures; trends in beneficiaries and expenditures by major services; and major Medicaid program characteristics, including State options and descriptive and statistical data on eligibility, benefits, financing and administration, service use, expenditures, and federal matching rates.

3.2 Overview of Chief Characteristics, Strengths and Weaknesses of Data Sources Reviewed

In order for the reader to obtain a quick overview of each of these data sources, three tabular displays have been prepared. Exhibit 3 characterizes the major categories of data included in each source. Exhibit 4 provides some general characteristics of each reviewed source. Together, these two exhibits provide a descriptive overview of the data sources.

Exhibit 5 is intended to assess the strengths and weaknesses of each data source in a general fashion. This exhibit is structured so that a "yes" or positive indication in the column under a data source represents a strength of that data source, while a "no" or negative indicator represents a weakness of the data source. There are occasions where a particular factor is not relevant to a given source. These are indicated by "N/A."

Exhibit 3

MAJOR CATEGORIES OF DATA INCLUDED
IN EACH HCFA DATA SOURCE REVIEWED

DATA CATEGORIES	HCFA 2082 ANNUAL	HCFA 102 MONTHLY	MOC DATA BASE	DATA BOOK	TAPE- TO-TAPE	NMCUES	SURVEY OF IMPAIRED INDIVIDUALS	PROGRAM CHARACTER- ISTICS	NGA CATALOGUE	IGHPP SURVEY	HCFA WAIVER FILES AND REPORTS
Program Characteristics											
-Benefit Package				P				C	P	P	P
-Eligibility Standards				P				C	P	P	P
-Reimbursement Structure				P				C	P	P	P
-Utilization Controls				P				C	P	P	P
-Delivery System Innovations				P				C	P	P	P
-Waivers				P				C	P	P	P
Expenditures/Utilization											
-By type of service	A	A	U	A	U	U					
-By aid category	A	A	U	A	U	U					
-By recipient characteristics	A	A	U	A	U	U					
-By type of provider				A	U	U					
Recipient Characteristics											
-Basis of Eligibility	A	A	U	A	U	U	U				
-Age, Sex, Race	A		U	A	U	U	U				
-Income			U		P	U	U				
-Assets			P		P	U	U				
-Household Composition			U		U	U	U				
-Employment											
-Prepaid Enrollees											
-Health Status	A	A		A	U	U	U				
-Other Insurance						U	U				
-Total Health Expenditure			U		U	U	U				
-Out-of-Pocket Expenses						U	U				

Key: A = Aggregated data
U = Unit record data
C = Complete data
P = Partial data

Exhibit 4

MAJOR CHARACTERISTICS OF EACH
HCFA DATA SOURCE REVIEWED

DATA SOURCE CHARACTERISTICS	HCFA 2082 ANNUAL	HCFA 120 MONTHLY	MQC DATA BASE	DATA BOOK	TAPE-TO-TAPE	NMCUES	PROGRAM CHARACTERISTICS	NGA CATALOGUE	IGHPP SURVEY	SURVEY OF IMPAIRED INDIVIDUALS	HCFA WAIVER FILES AND REPORTS
PERIOD COVERED	Annual since 1973	Monthly since 1973	April - September	1973-1979	1980-1981	1980	February 1982	1978-1981	1978-1981	Jan 1982	Since program inception
TIME LAG OR MOST RECENT PERIOD AVAILABLE	1 quarter later	1 month later	One period only in 1982	1982	1982	Third quarter 1982	Only one period in April 1982; May be expanded retrospectively & prospectively	July 1981	1981	Feb 1983	As applications are filled and annually during waiver periods
FREQUENCY OF ISSUANCE	Annual	Monthly/Quarterly	One time under contract. Continuity uncertain.	Annually	One time under contract. Continuity uncertain.	One time	One time under contract. Continuity uncertain.	Anticipated quarterly	As needed	One time	On-going
REPORTING UNIT	State and national	State and national	Person/case	State and national	Person	Person	State	State	State	Person	State
JURISDICTIONS COVERED	All states	All states	All states in 8 regions	All states	5 states (1)	National and 4 states (2)	All states	All states	All states	National	All waived states
SAMPLE SIZE	Total Medicaid	Total Medicaid	60,000/year	Total Medicaid	5-state total	6,000 national households + 1000 households per state	All states	All states	All states	6,000 impaired Medicare aged	All states
SOURCE OF DATA	State reports based on paid claims and eligibility files	State reports based on paid claims and eligibility files	HCFA Federal MQC review sample for 8 regions	Other HCFA reports	State-paid claims and eligibility files	Personal interview; state-paid claims and eligibility file	State plans State contacts	Telephone survey of state contacts	Telephone survey of state contacts	Personal interview	State submissions in requesting waivers. New form to be required to track 2176 waivers.

(1) California, Georgia, Michigan, New York and Tennessee.
(2) California, Michigan, New York and Texas.

MAJOR STRENGTHS AND WEAKNESSES OF EACH HCFA DATA SOURCE REVIEWED

	HCFA 2082 Annual Report	HCFA 120 Monthly Report	MHC Data Base	Data Book	Tape-to-Tape	NRQUIS	Program Characteristics	NCA Catalogue	ICIRP 50-State Survey	Survey of Impaired Individuals	HCFA Files and Reports
● <u>Completeness, Accuracy & Accessibility of Data</u> <ul style="list-style-type: none">- Complete Data for All States- Data Verified From Multiple Sources- Claims with Long Processing lags Included	Yes No Yes	Yes No Yes	Yes Usually N/A	Yes No Yes	No No Yes	No Yes Yes	Yes Yes N/A	No Yes N/A	No No N/A	No No N/A	Yes No N/A
● <u>Timeframe/Continuity of Data</u> <ul style="list-style-type: none">- Ongoing Data Source- Includes Longitudinal Data on Eligibles- Includes Longitudinal Data on Providers- Includes Data Prior to OSRA*- Includes Data Subsequent to OSRA- Data Available Within 1 year	Yes No No Yes Yes Partial	Yes Aggregated No Yes Yes Partial	Yes No No Yes Yes Partial	Yes No Yes Possibly No	Uncertain Yes Yes Yes No	No Yes No Yes No	Uncertain N/A N/A Possibly Yes Yes	Uncertain N/A N/A Incomplete Yes Yes	No No No No Yes Uncertain	Yes Partial No Yes Yes Yes	
● <u>Level of Detail</u> <ul style="list-style-type: none">- Data Are Person-Based- Data Are State-Specific- Includes Detailed Eligibility Data- Includes Detailed Service Data	No Yes No No	No Yes (2) No	No Yes No No	Yes Yes Yes Yes	Yes Yes (1) Yes Yes	No Yes N/A N/A	No Yes N/A N/A	No Yes N/A N/A	Yes No Yes Yes	No Yes No No	
● <u>Sampling Considerations</u> <ul style="list-style-type: none">- Sample Size Sufficient for State-Level Analysis- Sample Size Sufficient for Substate Analysis- Sampling Comparable Across States	Yes Yes Yes	Yes Yes Yes	N/A N/A N/A	Yes Yes Yes	4 States 4 States Yes	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A	No No Yes	Yes No No	
● <u>Other Design Considerations</u> <ul style="list-style-type: none">- Data Permit Age/Sex Adjustments- Data Permit Separate Estimates for Institutional and Non-Institutional Services- Includes Data on Institutionalized Eligibles- Includes Data on Retrospective Eligibles	No No Yes Yes	No No Yes Yes	N/A Yes No No	Yes Yes Yes Yes	Yes Yes No No	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A	Yes No No No	No Yes Yes No	
● <u>Exogenous Data Availability</u> <ul style="list-style-type: none">- Includes Data on Income/Resources- Includes Data on Diagnoses- Includes Data on Non-Medicaid Payments- Includes Data on Health Care Resources- Includes Data on Health Care Prices- Includes Data on Population Demographics	No No No No No (4)	Yes No No No No (4)	Partial No No Partial No Yes	No Yes Partial No Yes Partial	Partial Yes Yes No Yes	N/A N/A N/A Yes Yes Yes	N/A N/A N/A Yes Yes Yes	N/A N/A N/A N/A N/A	Partial Yes Yes No No Yes	N/A No Partial Partial No Partial	

(1) Four (4) states and National

(2) Gross Categories Only

(3) At National Level Only

(4) Very Limited

* Omnibus Budget Reconciliation Act

Readers who would like more detailed descriptions of the data sources should refer to Appendix C to this report (bound separately) or to Cromwell, Schurman and Adler (1982)* for additional information. Chapter 4 builds upon this data source assessment by considering the utility of each relevant source for addressing each of the Medicaid policy issues developed in Chapter 2 and by suggesting supplementary approaches when existing sources are insufficient to address a particular issue.

*Cromwell, J., Schurman, R., and Adler, G.S. Uses, Strengths, and Weaknesses of Selected Medicaid Data Bases. HCFA Working Paper OR-36, March, 1982.

Chapter 4

EVALUATION OPTIONS

In this chapter evaluation study options are presented for each of the nine issues selected for study. A uniform format is used to discuss each issue. The format is as follows:

X.1 Issue

- X.1.1 Utility of Research in This Area
- X.1.2 Evaluation Questions
- X.1.3 Assessment of Data Sources
Chart
- X.1.4 Short Term Study Options
 - Objectives
 - Methodology
 - Potential Problems
- X.1.5 Long Term Study Options
 - Objectives
 - Methodology
 - Potential Problems

The discussion begins with a review of the Federal and State policy decisions likely to be faced and an indication of how evaluation information might help in the decisionmaking process.

Next, evaluation questions are formulated which elicit the information and analysis needed by policymakers. For some issues, the evaluation questions presented are divided into two categories. The first category, Primary Questions, contains questions which have been identified as questions of strong interest by a broad sample of our interviewees. The second category, Secondary Questions,

contains questions which are of interest to a narrower group. The secondary questions are provided for information purposes only. They are not addressed in the subsequent assessment of data sources for each issue, nor do the research designs include approaches to answering them.

Following the identification of the evaluation questions, the ability to answer them using selected HCFA data bases is assessed. A chart is presented which identifies the information needed to address the evaluation questions and reviews the selected data sources for potential usefulness. The strengths and weaknesses of each source are indicated in the chart, as is the availability of the data. When more than one source could be used, an indication is given as to which data source is preferred.

The discussion of each issue concludes with study design options for undertaking the needed research, both in the short term and the long term. For each issue the study design options include one or more studies or projects. The description of each study includes a discussion of where the required data can be most easily obtained and how analysis should proceed. Most often these projects involve the analysis of information from existing HCFA data bases. However, in some instances, the projects require the collection of original data. In these cases, the study options attempt to emphasize relatively quick, low cost data collection options such as telephone inquiries, case studies, or piggybacking on research and demonstration projects, rather than the establishment of new reporting or fixed data systems. In only a few cases are surveys recommended.

To facilitate consideration of the study options, they have been divided into studies which can be undertaken within the short term (the next 18 months) and those which require a long term time horizon (18 months to five years). To make this distinction, some assumptions had to be made about when certain HCFA data bases would be available. Obviously, to the extent these assumptions prove

to be erroneous, adjustment will need to be made in the projected schedules.

For both the short-term and long-term study options, the discussion begins with a review of study objectives, followed by a description of the research methodologies which could be employed. Finally, potential problems with the proposed study options are mentioned.

Several caveats should be mentioned about the study design discussions. To begin with, the study design options presented are not meant to represent an exhaustive list of the studies which could be undertaken for each issue or a complete layout of methodology and treatment of methodological problems. Many of the issues and evaluation questions call for extremely complex research studies. Since project resources were limited, only an initial outline of the needed research and analysis could be developed. Completion of a more in-depth study design will be required for most of the projects DBS decides to pursue. The intention for this report was not to produce final and complete study designs for every issue but to develop preliminary research strategies for DBS to consider. As mentioned in Chapter 1, this report contains a variety of research and evaluation options from which DBS will choose. After these choices are made, preparation of more detailed study designs should be the first order of business.

A second caveat is that the extreme complexity of the Medicaid program greatly confounds analysis. Although the report includes comments about the need for control variables and consideration of exogenous factors, it is impossible to say enough about the difficulty of undertaking research on the Medicaid program. Literally hundreds of policies make up each State's Medicaid program, and the interstate program differences are enormous. In addition, more than one policy change may occur at the same time, making it difficult to sort out the various cause and effect relationships. Finally, elements outside the program often greatly influence the program outcomes.

The cost of the Medicaid program is a function of eligibility, reimbursement and benefits. Because of the complexity of the program, in many cases changes are occurring in all of these factors at the same time, making it impossible to look at the impact of any single change in isolation. Thus, all Medicaid research has to be undertaken and interpreted cautiously. However, during the interviews, policymakers repeatedly emphasized that some information and research results, even with pages of disclaimers, are far preferable to none.

4.1 Home and Community Based Services Waivers

4.1.1 Utility of Research in This Area

There is widespread interest at both the Federal and State levels of government in the results of evaluation of home and community based services waiver programs. Federal level policymakers, both agency and Congressional, would find evaluation findings useful as they make the following decisions:

- Should the home and community based services waiver program be continued and/or written into law?

This decision will most likely depend on whether home and community based care proves to be a more cost-effective way to provide services than does institutional care and whether it is possible to target those services to those who would actually otherwise be institutionalized.

- Should the service package under the program be standardized at some level?

If it appears that some services are the key to maintaining certain populations in the community who would otherwise be institutionalized, there will be interest and benefit in defining those services as a minimum benefit package.

- Should Federal law and regulations mandate specific patient screening and assessment procedures?

Currently, nursing home pre-admission screening programs are only mandated for those states which are participating in the waiver program. If all or certain of these programs are shown to be effective in reducing the incidence of institutionalization independent of the availability of broader services packages, there will be interest in extending the mandate to operate such programs.

- What role should the government play in building provider capacity to supply home and community based services (seed monies, recruitment and training, technical assistance)?

The successful exploitation of the cost savings potential of home and community based services depends on the availability of individuals and organizations to supply such services. Historically, many providers of these services have been small, non-profit organizations without the assets or borrowing capability to allow for expansion. Cash flow

problems have plagued the community service industry. Since Medicaid operates on a fee for service basis, it will be necessary for providers to look to other sources for start-up funding. Further, many providers do not currently have the skills or systems to successfully manage large scale operations.

- To what extent should home and community based services be regulated and by whom?

This decision will most likely be a function of the quality of service provided and the degree of dependency of the population served. The question of who should regulate (the recipient, the provider community, the States, the Federal government) is both a philosophical decision and a decision based on relative capacities and willingness to regulate effectively and efficiently.

These decisions are basic to the provision and management of long term care services, whether the services are provided as part of a Federal-State Medicaid program or as part of a federalized Medicaid program. However, as Federal policymakers consider their options in terms of federalizing the program, detailed information on the status and outcomes of diverse State programs becomes even more essential.

At the State level, individual States are currently facing the decision of whether to participate in the waiver programs and, if participating, how to design an effective screening, assessment, and service package. The States are also concerned with the availability of services and with provider capacity building. In a recent survey concerning the nineteen Medicaid-related provisions of the OBRA,* States ranked the home and community based services waiver provision second in implementation priority and

*Bartlett Associates. Assessment of State Medicaid Agencies Technical Assistance Needs Resulting from Passage of P.L. 97-35, The Omnibus Budget Reconciliation Act of 1981. Prepared for the Medicaid/Medicare Management Institute, Health Care Financing Administration, U.S. Department of Health and Human Services. HCFA Contract No. 500-80-0051. 1982.

fifth in perceived cost savings potential. It was ranked first as an area in which technical assistance and information was requested.

4.1.2 Evaluation Questions

Nine evaluation questions have been developed regarding the home and community based care waiver program. Eight of these are classified as Primary Questions and one as a Secondary Question.

Primary Questions

The home and community based services waiver program as currently constituted offers a great deal of flexibility with regard to participation and program design. The first series of questions is designed to provide information to policymakers on the degree of State participation in the waiver program, possible motives for participation, the particular screening, assessment and service packages developed, and the per capita and aggregate savings projections by States.

1. How many States have filed waiver requests under the home and community based services provision of the 1981 Omnibus Reconciliation Act? Describe the proposed waiver programs in terms of the scope and number of services to be offered, the population to be served, provisions for patient screening and assessment, and geographic areas to be served. Discuss the comparability of Medicaid-reimbursed home and community based services within and across States. How are these services related to previously existing programs?
2. How many States have established mandatory pre-admission screening programs for nursing homes? Identify those which existed prior to the 1981 OBRA. Identify the population to be screened, i.e., Medicaid-only or all admissions. Compare and contrast significant characteristics.
3. Why did States choose to pursue the waiver option?
4. What is the total and range of aggregate savings projected by the States submitting waivers for each of the next three years? What are the current and projected average and range of differences in estimated per capita costs between the cost of services to an institutionalized person and the cost of services to a person in the community (controlled to the extent possible for age and disability level)? What are the projected increases in numbers of people being served? What

is the projected absolute and percentage change in the institutionalized population? What are the projected aggregate expenditures on home and community based services and what rate of increase does this represent? What are the projected aggregate institutional expenditures and what rate of increase does this represent? What are projected total expenditures for long term care? What rate of increase does this represent? How does it compare to historic rates of increase?

Questions 1 and 2 include only descriptive information, aimed at identifying specific programs and the range of diversity of all waiver programs. This information will be used later in analyzing the differential costs and cost-effectiveness of various service packages as well as in defining the utilization patterns of various populations.

Question 3 requests an analysis of why States choose to participate in the waiver program. An often-repeated hypothesis is that those States initially participating will be those with currently waived programs, those who have experience with such programs, or those who are planning large numbers of inter-title transfers as a response to the cutback in block grant funding. The validity of these assumptions should be examined, as should the attractiveness of the waiver program in light of other pressures in the long term care area.

Question 4 provides further descriptive information and addresses the issue of how States are making use of the waiver and what Federal expectations of savings should be. The key indicators reviewed are per capita expenditures for institutionalized and non-institutionalized recipients, change in the number of individuals institutionalized (either in long term care facilities or in hospitals awaiting long term placement), change in the numbers served in the community, and how all of these and their associated expenditures relate to historic trends. Of all of these indicators, the most difficult to measure is the number of individuals institutionalized. The number institutionalized is generally composed of one group actually in nursing homes and another group effectively institutionalized in acute hospitals awaiting nursing

home placement (administrative days). Where the number of administrative days is significant, there will be back-filling of nursing home beds emptied by the waiver program, masking the impact of the program on the nursing home population. Therefore, the number of administrative days must be monitored as well.

Unfortunately, this is very difficult to do.

The next three questions focus on the impact of the waiver program.

5. Are States meeting their targets in terms of number of services, numbers served, savings, per capita expenditures, impact on institutionalized population? In what specific areas are shortfalls occurring? Are they meeting Federal requirements for continuation of the waiver?
6. Did waiver program clients receiving home and community based care formerly receive no service, private services, a lower level of services under Title XIX, or services funded by another public program? To what extent did inter-title transfers from Titles III and XX to Title XIX occur?
7. How many of the individuals served under the waiver were previously institutionalized? How did per capita expenditures vary between this group and the group that was not previously institutionalized? How did mix and utilization of services vary between the two groups? How did mix and utilization of services vary between these two groups and those not covered by the waiver (controlling to the extent possible for age and disability level)?

Question 5 focuses on whether States are able both to meet their own goals for service levels and expenditures and to operate within the Federal limits on per capita and aggregate expenditures.

Question 6 addresses the issue of whether Medicaid-funded home and community based services are add-on services to or substitute services for care previously received from other sources as opposed to being substitute services for institutional care.

Question 7 addresses the issue of what the mix of services utilized under this waiver is by major group and how this differs from the mix of services utilized by groups not under the waiver. This information will be important in determining which services are

the key to successful deinstitutionalization, which services should constitute a minimum benefit package, and which social services can serve as a substitute for more expensive health care services.

The final primary question focuses on program design and implementation issues and responds to the great number of requests by States for technical assistance with all aspects of this program.

8. Discuss program design options and models in these areas: service packages, assessment and screening tools, case management, fiscal management of community based program models (payment mechanisms, start-up funding issues), guidelines and standards, and provider development, recruitment and training. Discuss implementation successes and failures of various models.

Secondary Questions

The only significant secondary question raised was the following:

9. What is the quality of home and community based care provided under the waiver program?

There is a good deal of concern that because home and community based care has been largely unregulated and employs untrained personnel, especially in the social service area, poor quality care will result. This is particularly a concern under those program models where payment mechanisms such as vouchers and cash payment to recipients are utilized.

4.1.3 Assessment of Data Sources

There are three general types of data required to answer Questions 1-8: descriptive data, statistical data required to construct the indicators significant to the analysis of home and community-based waiver programs, and data on exogenous variables. The specific types of data required are:

- Descriptive data on State Medicaid programs and on home and community-based care waiver programs.

- Statistical data on projected Medicaid utilization and expenditures, per capita and aggregate, for the population covered by the waiver and on the projected number of recipients of various services.
- Statistical data on per capita and aggregate actual Medicaid utilization and expenditures for the population covered by the waiver and on the actual number of recipients of various services.
- Statistical data on the historical coverage and utilization history of those not previously institutionalized and currently receiving home and community-based services under the waiver.
- Statistical data on actual Medicaid and utilization expenditures per capita and in the aggregate for the population not covered by the waiver.
- Data on exogenous variables such as age and disability level of recipients.

Exhibit 6 identifies the specific data required in all three categories, identifies and assesses potential data sources, discusses the availability of data, and indicates preferred data sources.

Based on the analysis shown in Exhibit 6, the following general observations can be made concerning the availability of data to respond to the evaluation questions of interest:

- Data on State Medicaid program and waiver programs are available from a variety of sources and are currently being maintained as part of a HCFA data base. The Program Characteristics Data Base is the data base of choice, supplemented by detailed data from individual waiver applications as required.
- Data on State projections of utilization, costs and savings will be available from waiver requests.
- Data on actual State experience with utilization, costs and savings will be available from required waiver impact monitoring reports and from HCFA 120 and 2082 reporting, except for data on administrative days, which are not available.

Exhibit 6

ASSESSMENT OF DATA SOURCES FOR HOME & COMMUNITY-BASED WAIVERS

DESCRIPTIVE DATA

Indicators	Components	Potential Sources	Strengths	Weaknesses	Availability	Preferred Source(s)
Waiver characteristics	<p>Waiver implementation date(s)</p> <p>Groups covered</p> <p>Services covered</p> <p>Screening activities</p> <p>Geographic areas included</p> <p>Other provisions</p>	<p>A. Program Characteristics Data</p>	<p>1. Data are State-specific.</p> <p>2. Computerized.</p> <p>3. Waiver data linked to other programmatic data.</p>	<p>1. May be discontinued.</p> <p>2. Not yet clear what data will be extracted on waivers.</p>	<p>Waiver program initiated in October 1991. Data available for February 1992 and possibly prospectively.</p>	<p>X (If complete data are available)</p>
		<p>B. HCFA Waiver Files</p>	<p>1. State-specific information.</p> <p>2. Complete and accurate data.</p> <p>3. Current.</p>	<p>1. Information in manual form only - must be abstracted.</p> <p>2. No requirement for cross-State comparability.</p>	<p>On-going.</p>	<p>(If A not sufficient)</p>

DESCRIPTIVE DATA

Indicators	Components	Potential Sources	Strengths	Weaknesses	Availability	Preferred Source (s)
State Medicaid program characteristics	Coverage of personal care	A. Program Characteristics	1. Provides data on a State-by-State basis.	1. May be discontinued.	1. Will provide data for February 1982 and possibly pro-spectively.	X
	Pre-admission screening programs			2. Does not include expenditures.		
	Percent Medicaid long term care	B. Data Systems maintained by NGA and IGHP	1. Provides State-level data. 2. Updated on a regular basis. 3. Most complete source before February 1982.	1. No baseline data. 2. Less reliable and complete than A. 3. May be discontinued.	1. NGA data cover July 1978-July 1981. Quarterly update planned. 2. IGHP data cover 1981 proposed changes. Update schedule unclear.	(As needed retro-spectively to augment A)
	Other long term care waivers and demonstrations					
		C. HCFA 2082 (Annual) HCFA 120 (Monthly)	1. Includes State-specific data on long term care expenditures.	2. Does not contain the other data elements.	1. 2082 - On-going. Hard copy available after close of Federal FY; tapes and published data considerably later. 2. 120 - On-going. Hard copy available one month after reporting period. Currently 15-month lag in computerizing data.	X (For long term care expenditure data)
Other State characteristics	Title XX coverage of home & community based services	A. Program Characteristics Data	1. State-specific data. 2. Computerized. 3. Contains some resource and demo-graphic data.	1. May be discontinued. 2. Does not include Title XX data. 3. Does not contain complete resource and demographic data.	1. Will provide data for February 1982 and possibly pro-spectively.	X
	Nursing home beds Population demographics	B. Special Studies	Not reviewed.	Not reviewed.	Not available.	X (For Title XX Data)

STATISTICAL DATA

66

Exhibit 6
(continued)
STATISTICAL DATA

Indicators	Components	Potential Sources	Strengths	Weaknesses	Availability	Preferred Source (s)
Number of administrative days		Special Study	Not reviewed.	Not reviewed.	Not reviewed.	Not available.
Frequency distributions showing prior and current use of	Counts, for individuals not previously institutionalized and now receiving home and community based services, of number receiving services and amount of service (pre and post waiver) funded or provided by	Special Study	Not reviewed.	Not reviewed.	Not reviewed.	Not available.
-Title XX services	- Title III					
-Private services	- Title XX					
-Title III services	- Title XIX					
-Title XIX services	- State-only programs					
	- Private sources					

- Data on the historical coverage and utilization of recipients not previously institutionalized and currently receiving home and community based services are not available except through special studies.
- Data on age and disability levels are not available except through special studies.

The implications of this for the feasibility of responding to the specific evaluation question identified are as follows:

- Questions 1 and 2 (descriptive data on home and community-based care waiver program and pre-admission screening programs) can be answered fairly easily and quickly utilizing the Program Characteristics data base (for February 1982 and after), the NGA and IGHP data bases (for periods before February 1982) and Federal Waiver files with the caveat that there may be some problem in obtaining comparable data on all screening and waiver programs from these sources. Inquiries may be needed to obtain fully comparable data.
- Question 3 (Why States pursue the waiver option) cannot be answered by any of the data sources surveyed by this study. It should be addressed by a survey of the States involved, possibly including interviews with State Medicaid directors.
- Questions 4 and 5 (savings projections and actual savings) can be answered for the most part by Report 1 of the Waiver Monitoring Reports, with some data required from the HCFA 120 and 2082. Both of these are ongoing data sources (assuming that Report 1 is approved as is and issued).
- Question 6 (services received previously) cannot be answered using any of the data sources examined as part of this study.
- Question 7 (variation in cost, mix and utilization of services by group) can be answered by Report 2 of the Waiver Monitoring Reports except that the report only provides expenditure, not utilization, data and that controlling for age and disability level differences will not be possible as the data are not person based.
- Question 8 (program design options) can only be answered by case studies.

4.1.4 Short-Term Study Options

In the next eighteen months, DBS could undertake and complete a short-term evaluation project to address Questions 1-5 and to partially address Question 7. As long as the waiver monitoring data set is approved and issued on a timely basis in its current form, and State cooperation is required, the data should be readily available, with the exception of data on characteristics of States pursuing the waiver option, which may require a brief survey.

The overall objectives of such an effort would be to summarize available descriptive information on home and community-based waiver programs, to identify initial service and savings goals, and to compare actual results with projections.

More specifically, the project would:

- Document the response of States to the waiver option during the first year,
- Describe the waiver programs approved in a standard format and with a fair amount of detail,
- Identify those factors leading to State participation in the waiver programs,
- Document the service and savings goals of the States undertaking the program,
- Document the actual results and compare them to projections, and
- Analyze differences in the mix and cost of services utilized by various populations (institutionalized, formerly institutionalized, never institutionalized).

Another separate study which could be undertaken and completed in an eighteen month period would respond to Question 8 and would consist of a survey and assessment of program design options open to States participating in the home and community-based care waiver program.

The objective of this study would be to provide timely management information to the States. A good summation of Title XX and Title III home care experiences as well as the experience of the States participating in the channeling and other home care demonstrations would be invaluable to States as they consider expanding home care services under Medicaid. More specifically, the project would collect and disseminate available information, develop a framework for decisionmaking in home care program planning, and publicize promising practices.

The first of these two studies would respond to the needs of Federal policymakers in evaluating the potential and problems of this program. The second would respond to requests from States for information assistance in the design of programs and the solicitation of providers.

Methodology

The methodologies of the two proposed studies would differ substantially.

The first study would have two major components. One component would be primarily descriptive and based heavily on the waiver applications submitted by States and other readily available data, supplemented where necessary by inquiries to States. The second component would be analytical and based heavily on the data reported as part of the waiver monitoring data set. The tasks required by the first component would include:

- Development of a framework which would allow for listing and comparison of the major components of each States' programs, including service, cost and savings projections.
- Identification of the States who have submitted waiver applications and whose applications have been approved.
- Description of those waiver requests using the framework described above.

- A survey of participating States to discuss their reasons for participating in the waiver program, including their perceptions of the risks and benefits. Interviews with State Medicaid officials, either by phone or on site, would be helpful.
- A summary of the projected shifts in utilization from nursing homes to community-based care, changes in aggregate numbers served, and of per capita and aggregate savings.

The findings from this component of the study should be released as soon as possible to provide information to States still evaluating the benefits of participation and to policymakers evaluating the success of State flexibility as a policy to bring about change and cost savings.

The second component of this study is dependent on the results of the waiver monitoring report, which must be submitted at the end of each year of the waiver period. As of March 1982, fourteen waiver applications had been submitted, but only three had been approved. The availability of data on results within the next eighteen months will therefore be quite limited. Further, the first year of operation of the waiver is likely to be atypical in terms of results, both in regard to volumes and effectiveness. However, there could be some preliminary analysis of results versus expectation in the lead States participating in the waiver program.

The specific tasks required by the second component include:

- A comparison of projected and actual operating statistics, cost and expenditure data.
- An analysis of the overall mix and cost of services, both waived and other, used by the various populations covered by the waiver and a comparison of this service mix to the comparable populations not covered by the waiver. This analysis will begin to get at the issue of the interaction of health and social services, their relative costs, and the substitution of one for another.

The methodology for the second study, focusing on assessment of program design options, would consist of the following tasks:

- A literature review of available material regarding home and community-based care programs, including reports on innovative approaches and demonstrations, evaluations and State plans.
- A telephone survey of officials in State health planning, social services, Medicaid, and aging administration agencies, as well as selected Federal and regional HHS staff and staff from organizations such as the American Public Welfare Association, the National Governor's Association, and the Intergovernmental Health Policy Project. The survey should clarify current State practices, gather descriptions of the range of services and administrative procedures, identify prototype approaches and promising practices, and discover existing data. This survey would include proposed and operating waiver programs.
- Selection of several programs for in-depth review based on the information gathered and on a set of explicit selection criteria. Programs should be selected not only because of reported success but also because of the range of options they represent.
- Site visits to States to obtain in-depth information through interviews with staff, service providers, and client advocates. Information should be obtained on program characteristics and on administrative and casework practices, on policy and planning elements essential to replication of case study programs, and on program effectiveness.
- Data analysis to provide comparisons of the cost-effectiveness, potential impact, and replicability of the prototype programs.

The results of this study should be the following:

- A general catalogue of State program characteristics with regard to home and community based care in a uniform format for all States.
- A framework for decisionmaking, outlining the decision points managers face in designing home care programs and the tradeoffs involved.
- A "how-to-do-it" manual for home and community based care services utilizing information gathered during the site visits.

Potential Problems

Several potential problems exist with the first of the two proposed short term studies. To begin with, much of the above analysis depends on the adoption and promulgation of the waiver monitoring data set currently in draft form. If this does not happen, or does not happen soon enough so that States begin to collect the appropriate data, no information on results will be available and data on projections may not be comparable across States. A second potential problem in this area is a possible lack of cooperation by the States in the timely provision of accurate data. A third problem is that this data set includes only expenditure data, not utilization statistics. Thus, there can be no definitive conclusions drawn on differences in rates of service use, in relative unit costs of various services, or on substitution of health and social services. All results will have to be phrased in terms of aggregate and per capita costs and relative expenditures.

As stated previously, data on waiver results will be severely limited during the next eighteen months. Therefore, although some inferences can be drawn from the short-term study, it is only at the end of the second year of operation of the waivers that significant conclusions can be drawn regarding the impact of the waiver programs.

A final problem is that results using the proposed data bases cannot be controlled for age and disability level, which is a major drawback in the evaluation of comparative per capita costs of the institutional and non-institutional populations and of the potential cost-effectiveness of community-based care for various groups.

4.1.5 Long Term Study Options

Long-term evaluation work on the home and community-based care program should have two objectives: to update and complete the analysis of the results of the program as reported in the waiver monitoring reports and to analyze more detailed data to better understand the successes and failures of the program and their causes.

Two separate long-term evaluation efforts could be undertaken. The first would be a continuation of the first of the short-term evaluation studies based on more complete program data. If a person-based data set was created, analysis could be done of differences in the mix and cost of services utilized by various populations (institutionalized, formerly institutionalized now in the community, never institutionalized) controlling for age and levels of disability. Analysis could also be done of utilization rates, unit costs, and substitution effects. The second study would be designed to respond to Question 6. Specifically, the study would identify previous sources of care, identify the short-term impact of the program on private level of effort, and identify the extent and type of inter-title transfers.

Methodology

The methodology for the first study would be the same as was outlined in the Short-Term Study Options section. It would include an updated version of the descriptive data gathered for the short term study as well as data on any waiver programs initiated since the short term study. It would also have an analytical component comparing actual to projected results. The long term study should include actual results from many more programs than were available for the short term study and should be able to begin to reflect longitudinal effects of the early programs. The study could also utilize a person record data base (the development of which would require a survey) rather than the waiver monitoring data set, so that age and disability could be controlled for and utilization could be analyzed and unit costs computed. One way to control for age and disability would be to select stratified random samples of various groups by age and disability level and to test for significant differences in cost and utilization patterns. Another would be the use of regression to control for age and disability within a group.

In the second study, which could only be done using a person-based data set, the analysis itself would consist primarily of the construction of a series of frequency distributions showing any shifts over time in the level and sources of funding for home and community based services received by the population covered by the waiver. The types of services reviewed would ideally include services provided by family, friends and private philanthropy groups. The data collection efforts should focus on the group not previously institutionalized and receiving home and community based services under the waiver program.

The person-based data set required for portions of the long term studies would have to include detailed data on level and type of services received, source of payment, and disability levels over a two to three year period for the population covered by the waiver program. Such a data base does not currently exist and would have to be created. The most efficient way to do this would be to negotiate collection of such data as a condition of waiver approval with one or more States interested in obtaining data on these issues.

Potential Problems

The question of the impact of publicly funded services on the level of private effort (substitution) is a very complex issue with many dimensions including gross versus net effects, long-term versus short-term effects, and the issue of the alternative uses of private effort. It is properly answered only by a longitudinal study that looks at the caregivers as well as the recipient of care. The analysis suggested will provide only partial answers to the questions raised.

With regard to controlling for disability in developing answers to questions, it should be recognized that to identify disability level is a very complex task. Disability is a multi-dimensional concept, which makes it very difficult to rank order. There has been much discussion of, but little agreement on, an appropriate way

of identifying need for institutional care or ability to remain in the community, especially since these concepts are qualified by the availability or lack of availability of support services. The development of a meaningful scale will itself require a great deal of the effort in this study.

Finally, the effort involved in establishing a person-level data base of the level of complexity described will be costly and time-consuming. Further, there are specific problems of reliability associated with dependency on client recall to document services received in prior periods.

4.2 Inpatient Hospital Reimbursement

4.2.1 Utility of Research in this Area

The primary users of information and research on this issue will be Federal level policymakers and Congressional staffs. There is likely to be State interest in descriptive data, macro-level comparative analysis, and detailed case studies.

Federal policymakers, both in agencies and Congress, require the information gained through these studies to assist in making the following decisions:

- Should the policy of granting States increased flexibility in the administration of the program in this area be continued or should the Federal government exercise other options to cut costs (e.g., increased regulation or general financial incentives such as a Medicaid cap)?
- How should DHHS plan to handle the issue of inpatient reimbursement under a federalized program? Such a decision requires information on where the States are currently in terms of reimbursement methodologies, what the problems are in trying to develop a standardized reimbursement methodology across all States, and what the implications are of using any particular methodology.
- Should the Federal government continue to approve State reimbursement methodologies based on State assurances that their methodologies ensure reasonable access to care for recipients and fiscal solvency for hospitals, or should the Federal government play a stronger role in the review, approval, and monitoring of State reimbursement methodologies?
- If a choice of increased regulation at the Federal level is made, what form should such regulation take to most reliably achieve Federal goals? Which reimbursement methodologies have optimal impact (cutting costs without unreasonably reducing access or hospital fiscal viability)?
- Has cost shifting occurred to the extent that it should be addressed through Federal policy or regulation?
- What prospective reimbursement system has the highest likelihood of achieving Federal goals? The Secretary of Health and Human Services has been required by Congress to develop a model inpatient hospital prospective reimbursement system for both Medicaid and Medicare.

At the State level, a recent survey indicated that the inpatient hospital reimbursement provisions of the 1981 OBRA are ranked first in implementation priority and in perceived cost-saving potential.* From discussion with States, it is apparent that their major interest is in obtaining information on what other States have proposed as new reimbursement methodologies, what the Federal government will approve, implementation problems, and some general indicators of results and satisfaction in other States.

Most States feel that their individual political situations vary so much that it is unlikely that a given system can be effectively transported from one State to another. Therefore, they are most interested in discussion of various reimbursement methods and implementation issues to be used as background information in developing a system uniquely suited to their environment.

Therefore, the information most likely to be used by States in their decisionmaking is descriptive information and analysis of preliminary fiscal impact.

4.2.2 Evaluation Questions

Nine evaluation questions have been developed to address the concerns of policymakers regarding hospital reimbursement. Some questions test whether the expected impacts of the Reconciliation Act provisions have occurred. Other questions are directed to the potential second and third order effects of changes in reimbursement policies. Six of them have been classified as Primary Questions and three as Secondary Questions.

Primary Questions

The expectation at the Federal level, as stated previously, is that States will move away from cost-based reimbursement toward a variety of less costly alternatives. The first series of evaluation questions are designed to answer policymakers' questions on the number of States changing methodologies, on the characteristics of

*Bartlett, op. cit.

new methodologies, and on the fiscal impact of various methodologies, both absolute and relative.

1. How many States have changed their inpatient hospital reimbursement methodologies since passage of the Reconciliation Act? How many States have restricted the number of hospital providers through use of freedom of choice waivers?
2. List States' pre-Reconciliation Act inpatient hospital reimbursement methodologies and associated administrative structures, and describe the pattern of the changes since (e.g., from retrospective cost based to prospective, imposition of cap on annual increase in rates, implemented case-mix based methodology, negotiated settlements with hospitals). Document the treatment of specific significant cost and revenue components in each State's methodology.

The task of describing and developing a typology of reimbursement methodologies is extremely complex because there are literally hundreds of elements within each methodology, each of which could be treated differently, and there is very little agreement on which elements and treatments are most significant in terms of their cost impact or on what the degree of interaction is between elements.

It is probably not possible to classify different methodologies in such a way that analysis could be done which could identify the fiscal impact of the methodology and properly attribute the effect to certain elements of the methodology.

The work called for in Questions 1 and 2 is a gross description and differentiation of one methodology from another using their most obvious differences. These differences will not necessarily represent the strongest cost-containment elements of the methodology; but they do represent the most common differentiations used in discussing reimbursement methodologies (such as retrospective versus prospective, cost-based versus charge-paying, payment per diem versus per diagnosis or per admission). In addition, there are several cost and revenue component treatments that are also of interest and can be described and classified generally (such as historical versus price level depreciation,

recognition versus non-recognition of bad debt and free care, requiring or not requiring offset of gifts against operating costs).

The idea in responding to this question is to begin to describe the types of changes being made and general directions in which the States are moving.

Question 3 focuses on the overall impact of changes in reimbursement methodologies on hospital expenditures and attempts to relate differences in impact to gross-level differences in methodologies and State characteristics.

3. What has the change in the rate of increase in Medicaid hospital expenditures been, in the aggregate and by State, since the first quarter of FY 81, in total and by quarter, controlling for changes in number of eligibles and changes in benefit limits. Has there been a statistically significant change in the rate of increase since passage of the Reconciliation Act? Does this differ for States that have and have not implemented non-cost-based reimbursement systems? For States that do and do not have rate setting commissions? For States which have historically been relatively more generous to providers than to recipients and for those which have been relatively more generous to recipients than providers? In States which have and have not restricted the number of hospital providers through freedom of choice waivers?

Change in rate of increase was chosen as the test statistic based on the following analysis: Medicaid inpatient hospital expenditures can be measured in several ways, including total costs, average costs/eligible, average costs/recipient, average costs/stay, or average costs/day. Other study alternatives include comparing the gross dollar magnitude of these costs between experimental and control States and examining changes in the rate of increase in these costs.

Comparing States on the basis of gross differences in magnitude of inpatient hospital expenses would require control for the large number of exogenous variables which differ among the States. The same would be true for comparisons of average costs, whether per

eligible, recipient, stay or day of confinement, whether these exogenous variables remained static or changed during the period in question. It is doubtful that the data are adequate to support such analysis.

On the other hand, comparing States on the basis of differences in the rate of change in hospital expenditures somewhat simplifies analysis and data requirements. Only those exogenous variables which had changed, and therefore would be expected to affect outcomes, would need to be considered. However, given the complexity of the Medicaid program, these could be numerous.

Analysis of whether changes in rate of increase vary with various factors in the methodology or the environment will require the use of a series of typologies of reimbursement methodologies (discussed above) and of the relative generosity of States to providers or recipients. The question of what the impact of new reimbursement methodologies will be in States which have historically been more generous to either recipients or providers arises because policymakers wish to know whether the tendency to fall on one side or the other of this line reflects a political or philosophical bias on the part of the States or has been instead an artifact of Federal regulations in a given area.

The next series of questions deals primarily with the potential second and third order effects of changes in reimbursement methodologies. Research on these effects will focus primarily on States where there was a change in reimbursement methodology with particular attention paid to States which also experienced a significant reduction in the rate of increase of hospital expenditures.

Questions 4-6 focus on the issue of whether recipient access to care has been reduced, either through providers withdrawing totally from the program or through providers limiting or changing the availability of services to recipients as measured by admission

rates, length of stay, mix of type of admission, and number of providers.

4. How has the Medicaid casemix adjusted per capita hospital discharge rate and average length of stay changed since passage of the Reconciliation Act -- overall, differentially for specific hospital service categories, and recipient age and eligibility groups? Has the distribution of discharges across provider types changed?
5. Has there been a change in the number of inpatient hospital providers?
6. Where there has been a change in the number of inpatient hospital providers, how has the mix of providers changed (teaching, public, community, proprietary)?

Changes in casemix adjusted per capita discharge rate and length of stay were used as indicators in Question 4 because they are the statistics which offer the most accurate assessment of the amount of change in access which occurs due to changes in rates of payment. This is because they allow for control of the impact of changes in caseload size and changes in the morbidity of the Medicaid population. However, it is also true that accurate calculation of casemix adjusted statistics requires person based records and extensive analysis. Should the required resources be unavailable, it is possible to use unadjusted per capita discharge rates and the measure described in Question 7 (changes in Medicaid patient days controlled for caseload growth) as a rough proxy for the more accurate indicators.

Secondary Questions

Question 7 focuses on the impact of any changes on hospitals with disproportionate numbers of low income patients and, parenthetically, on the issue of patient access to care. Public general hospitals are used as a proxy for this class. Disproportionate increases in Medicaid patient days, controlled for changes in caseload, will indicate the relative inaccessibility of

care in other settings. Disproportionate increases in occupancy may indicate a growing uninsured population. Net revenue per bed is a measure of indicating payments actually received by hospitals, after bad debt and the difference between costs and charges has been written off. Reductions in net revenue per bed (controlled for changes for occupancy, mix of third party payors, and changes in non-Medicaid reimbursement methodologies) will indicate the fiscal impact on the hospital of changes in the Medicaid reimbursement methodology.

7. What has been the change in Medicaid patient days (controlled for caseload growth), hospital occupancy rates (controlled for service population growth), and net revenue per bed of public general hospitals relative to those of other hospitals?

Questions 8 and 9 address the issue of cost shifting. The issue is whether reimbursement methodologies are actually cost-containing or whether costs are shifted so that other payors end up subsidizing public programs. Question 8 focuses on the actual growth in costs, relative to the increase in Medicaid expenditures. Question 9 focuses on increases in patient revenues. If revenues increase at least at the same rate as costs while Medicaid payments are decreasing significantly it is possible that cost-shifting is taking place.

8. How does the rate of change for States with non-cost-based reimbursement methods compare to the medical components of the CPI and to AHA statistics on hospital inpatient services costs?
9. What has the change in gross revenue per bed been, controlling for occupancy?

4.2.3 Assessment of Data Sources

There are three general types of data required: descriptive data, data required to construct the indicators significant to the

analysis of hospital inpatient reimbursement programs, and data on exogenous variables. The specific types of data required are:

- Descriptive data on State inpatient reimbursement methodologies
- Statistical data on Medicaid inpatient hospital expenditures
- Statistical data on Medicaid recipient access to inpatient hospital care, which includes both utilization and provider participation data.
- Statistical data on Medicaid provider participation
- Data on exogenous variables such as number of eligibles, case mix, and benefit limits

Exhibit 7 identifies the specific data required in all these categories, identifies and assesses potential data sources, discusses the availability of data, and indicates preferred data sources.

Based on the analysis in Exhibit 7, the following general observations can be made concerning the availability of data to respond to the evaluation questions of interest:

- Information on Medicaid Hospital Inpatient Reimbursement Methodologies is potentially available from a variety of sources and is currently being maintained as part of a Federal data base. The Program Characteristics Data Base is the data source of choice for any methodologies in effect as of February 1982. The NGA and IGHP reports should be used to attempt to establish a pre-1982 baseline, although the information in them is not at all detailed. They may be supplemented by waiver files and inquiries to States. Other potential sources include the Commerce Clearinghouse Medicaid and Medicare Guide and various studies published by DHHS.
- Information on Medicaid Hospital Use and Expenditures is available on an ongoing basis from both the HCFA 120/2082 data base and the Tape-to-Tape data base. HCFA 120/2082 data are only available at a highly aggregated level. For detailed data, the data base of choice is the Tape-to-Tape data base.
- Information on Medicaid Provider Participation will require use of the Tape-to-Tape data base or special surveys of States.

Exhibit 7

ASSESSMENT OF DATA SOURCES FOR HOSPITAL INPATIENT REIMBURSEMENT

DESCRIPTIVE DATA

General Category	Specific Data Required	Potential Sources	Strengths	Weaknesses	Availability	Preferred Source(s)
Medicaid hospital reimbursement methods	For each distinct method employed over time to reimburse hospitals	A. Program Characteristics Data System	1. Provides data on State by State basis. 2. Detailed data.	1. May be discontinued.	1. Provides data on methods in place in February 1982 and possibly prospectively.	X
	-date(s) of applicability	B. HCFA Waiver Files	1. Provides data on State by State basis.	1. Degree of detail and accuracy varies widely. 2. Maintained manually. 3. No historical record.	1. Ongoing.	
	-whether cost-based or not	C. Data systems maintained by NGA and IGHP	1. Provides State by State data. 2. Updated on regular basis. 3. Most complete source prior to February 1982.	1. No baseline data. 2. Less reliable and complete than A. 3. May not be re-funded. 4. No permanent record.	1. NGA data covers July 1978-July 1981. Quarterly update planned. 2. IGHP data covers 1981 proposed changes. Update schedule unclear.	
	-details of reimbursement approach					
	o cost-finding methods					
	o rate-setting methods					
	o casemix adjustments etc.					
	-administrative arrangements					

Exhibit 7
(continued)

STATISTICAL DATA

Indicator	Components	Potential Sources	Strengths	Weaknesses	Availability	Preferred Source (s)
Per capita utilization Total and per capita expenditures Provider participation rates	Number of eligibles by group Utilization statistics by age, eligibility group and service Expenditures by age, eligibility group and service Providers participating by provider type	A. HCFA 120 (monthly) HCFA 2082 (annually)	1. Data are State-specific. 2. Monthly, quarterly, and annual totals. 3. Comprehensive: almost all States for almost all time periods.	1. Timeliness, accuracy, and completeness have been problems in past; currently improving. 2. Cannot provide data on individual providers due to aggregation. 3. Cannot provide data on medically needy population for period prior to FY 80. 4. Data, except for eligibility data are all for month or year of payment not of service. 5. No eligibility counts are available on the annual data (2082). 6. Data available only for highly aggregated eligibility categories. 7. No provider participation data.	1. 2082 - Ongoing. Hard copy available after close of federal FY; tapes and published data considerably later. 2. 120 - On-going. Hard copy available one month after reporting period. Currently 15-month lag in computerizing data.	X

Exhibit 7
(continued)

STATISTICAL DATA

Indicator	Components	Potential Sources	Strengths	Weaknesses	Availability	Preferred Source (s)
B. Tape to Tape			1. Person based unit records.	1. Four State, two year data base (FY 80-81) at present.	1. 1980-81 data in 1983. Subsequent availability based on level of funding.	X (For utilization, expenditure, and provider participation data for more specific eligibility and service categories than those covered in HCFA 120 and 2082)
			2. Reliable data taken from State paid claims tapes.	2. May not be expanded or continued.		
			3. Provides utilization and expenditure data on all services.	3. Cannot count non-participating providers.		
			4. Provides data on all eligibility groups.	4. Must be coupled with data on hospital characteristics to sort by provider type.		
			5. Can produce counts of participating providers.			
			6. Includes institutionalized and non-institutionalized.			
C. NMQUES			1. Person-based data.	1. National data plus 4 State Medicaid sample.	1. 1980 data in 1983. 2. Preliminary data in 1982.	
			2. Combines self-report with eligibility claims records.	2. One year only (1980).		
			3. Identifies Medicaid plus out-of-pocket and other third party.	3. Utilization may be under-reported. 4. Excludes institutionalized. 5. No provider participation.		

Exhibit 7
(continued)

STATISTICAL DATA

Indicator	Components	Potential Sources	Strengths	Weaknesses	Availability	Preferred Source(s)
	D. MQC		<ol style="list-style-type: none"> 1. Case and person-based. 2. Very reliable data. 3. Contains detailed eligibility data. 4. Contains data on third party liability. 5. Spend-down information 6. Cross-program data. 7. Samples represent State Medicaid populations. 8. Includes both institutionalized and non-institutionalized. 9. Includes every State and Territory. 	<ol style="list-style-type: none"> 1. Sample sizes small for any substate analyses. 2. Excludes "State-only" recipients. 3. Some states have separate samples for eligibility versus utilization and expenditures. 4. Service detail on claims records is limited. May not correspond to service categories of interest. 5. Includes services only if claim processed within four months of review month. 6. No provider participation data. 	1. Six months after close of semi-annual periods.	

EXOGENOUS VARIABLES

Variable	Potential Sources	Strengths	Weaknesses	Availability	Preferred Source(s)
Program characteristics -Benefits covered -Benefit limits -Freedom of choice waivers	A. Program Characteristics Data	1. Data use State-specific. 2. Computerized. 3. Waiver data linked to other programmatic data waivers.	1. May be discontinued. 2. Not yet clear what data will be extracted for.	1. Will provide data on waivers as of February 1982 and possibly prospectively.	X (If complete data are available)
	B. HCFA Central Office Waiver Files	1. State-specific information. 2. Complete and accurate data. 3. Current.	1. Information in manual form only must be abstracted. 2. No requirement for cross-state comparability.	1. On-going.	X (If A not sufficient)
Operational parameters -Casemix index -Hospital occupancy rate	A. Tape-to-Tape	1. State-specific. 2. Person-based. 3. Complete data for Medicaid discharges from each hospital. 4. Can be coupled with hospital characteristics data to incorporate occupancy rates by institution. 5. Detailed claims provide best basis for estimating casemix indices.	1. Five States and 2 years only (1980-81) at present. 2. May not be expanded or extended. 3. Limited diagnostic data limits sophistication of possible casemix measures.	1. 1980-81 data available in 1983. Subsequent data subject to availability of funds.	X

- Required data on exogenous variables is available through use of the Program Characteristics Data Base, HCFA Central Office Waiver Files and the Tape-to-Tape data base.

The implications of this for the feasibility of responding to the specific evaluation questions identified are as follows:

- Questions 1-4 (changes in methodologies, typologies of methodologies, fiscal impact and utilization) can be responded to on a macro level in the short term (18 months) using existing data bases.
- It is not feasible to perform any detailed analysis of the impact on utilization and provider participation (Questions 4-6) or any comprehensive review of fiscal impacts (Question 3) in the short term. First, many of these are by nature long-term impacts. They could not be identified until new reimbursement methodologies have been fully implemented by the States (through FY 1983 at a minimum) and have begun to affect the behavior of providers and recipients. Second, because for some of these questions a detailed level of manipulation would be required to control for all exogenous variables. Third, a response to some of these questions would require data which do not currently exist in any readily accessible State. The fact that data do not currently exist in usable form raises the question of resource constraints.

If the Program Characteristics and Tape-to-Tape Projects are continued and expanded, it will be feasible to respond to detailed questions concerning utilization and provider participating (Questions 4-6) with a reasonable resource expenditure by approximately FY 1984. If they are not, it will be very difficult to respond to such questions at any time.

4.2.4. Short-Term Study Options

In the next eighteen months, DBS could undertake a short-term evaluation project to address Evaluation Questions 1-3 on hospital reimbursement. Barring any significant change in resources or funding, the data required to undertake such an effort should be readily be available.

The overall objectives of such an effort would be to summarize available descriptive and fiscal information on inpatient hospital reimbursement methods and to perform limited impact analysis.

More specifically, the project would:

- Establish a pre-Reconciliation Act baseline. The reimbursement methodologies, administrative structures and rates of increase in general hospital inpatient expenditures of States prior to October 1981 need to be documented. Data on exogenous variables should also be collected for this period.
- Document and analyze hospital-reimbursement related changes in all these variables for the period from October 1981 through September 1982. Such analysis would establish the extent to which States change their methodologies, their changes in rates of increase for inpatient hospital expenditures, and whether any macro-level relationship appears to exist between these methodology changes and decreased hospital expenditures.
- Investigate whether there have been any concomitant changes in utilization of hospitals as measured by rates of admissions and length of stay.

Methodology

The methodology for the project would involve description and aggregate analysis. The first task would be to develop a framework to be used in describing the various pre- and post-Reconciliation Act reimbursement methodologies. As discussed in Section 4.3.2, this is not a simple task. The required data on reimbursement methodologies would have to be abstracted from the Program Characteristics Data Base. Then, a differential classification scheme would have to be developed to facilitate analysis of degree of fiscal impact.

The rates of increase in hospital inpatient expenditures should be computed for all States, by quarter, for the two-year period preceding and for the period since the Reconciliation Act passage, using the HCFA 120 and 2082 data. Rates of increase should be adjusted for changes in the rate of increase in the number of eligibles and for benefit package changes, at a minimum. Adjustments should also be made, where possible, for other substantial changes affecting hospital utilization. The date of implementation of new reimbursement methodologies should be

identified and tests made to determine the significance of any changes in rates of increase. Cross-tabs should then be prepared contrasting aggregate changes in rates of increase pre- and post-implementation for States which have and have not changed methodologies, for various types of new methodologies, and for various categories of States.

There should also be a review of pre- and post-implementation changes in rate of hospital admissions and length of stay, both to evaluate the amount of change in expenditures due to this source and to investigate any possible effects of reimbursement methodologies on access to care.

Potential Problems

The majority of the problems likely to be encountered have already been alluded to. Describing and classifying reimbursement methodologies is very difficult. All of the potential data bases for the study are only partially complete in terms of either time period covered or degree of detail.

In addition, the review of utilization changes cannot be definitive unless case mix change is controlled for. Further, there are going to be problems in reaching any substantial conclusions about the import of new methodologies for more than a few States. Unless States acted very promptly in revising their reimbursement methodologies, there will not be more than one or two quarters of post-change data available for analysis within the eighteen-month time limit.

Most importantly, it should be understood that the type of study described above cannot link any savings with any particular methodology. Methodologies are too complex to hope to be able to prove cause and effect through such a high level analysis. What this study will do is respond to policymakers' requests for information on what States are doing and what sorts of fiscal impact State activity is having.

4.2.5 Long-Term Study Options

To answer evaluation questions about the second and third order effects of changes in hospital reimbursement methodologies (i.e., whether changes in recipient utilization or provider participation have occurred) and to capture more complete data on changes in methodology and fiscal impacts would require a longer time period, less readily available data, and considerably more complex analyses. Any longer-term study could not be undertaken until new reimbursement methodologies have been fully implemented by States (through FY 1983 at a minimum). Thus, it would be at least late FY 1984 before results could be obtained.

Regardless of the methodology chosen, the specific objectives of this study would be the following:

- To continue to document changes in reimbursement methodologies and in rates of increase in hospital expenditures
- To continue to measure changes in rates of increase in hospital expenditures and try to relate these to general classes of methodologies.
- To determine the extent of changes in recipient utilization and provider participation.

Methodology

Two major options exist for studying longer-term reimbursement effects -- quantitative analysis and case studies. These options involve different methodologies and data sources. A study involving both methodologies would be ideal; with limited resources, the trade-offs between using the two approaches have to be assessed.

A quantitative analysis using various regression techniques could be undertaken to answer more completely evaluation questions about fiscal impacts (Questions 1-3) and recipient access (Questions 4-6). This analysis would require extensive recipient-based and provider data. As indicated in the data assessment section, HCFA 120 and 2082 data could be used for some of the analysis, but the

preferred source for most of the data is the Tape-to-Tape Project. It is not known whether Tape-to-Tape data will continue to be collected through 1983. It would also be necessary that the Tape-to-Tape Project cover the States in question; the number of States currently covered is extremely limited.

If the Tape-to-Tape data as specified could be obtained, analysis could involve a comparison of States using new reimbursement methods with a control group of States whose methodologies remained constant.

The principal methodology used should be multiple regression techniques, using the indicators already enumerated as the dependent variables, the types of hospital reimbursement methodologies as the independent variables, and the other population, benefit limits and controls, diagnosis, and MCPI factors as exogenous variables. Two research designs should be utilized:

- Pre-post within-State differences
- Cross-State differences using control-study group data, adjusted for exogenous variables and establishing cohorts of States

A second approach, case studies of a few selected States, would enable DBS to understand in-depth the operations of alternative reimbursement methods. Ideally, case studies would supplement the quantitative analysis, focusing on those States whose new reimbursement approaches appeared to be the most effective in containing costs. These States would also be the ones where the greatest interest would exist for exploring in-depth second and third order effects.

The case studies would describe in detail the mechanics of implementing various reimbursement methods. Information on start-up activities, transition concerns, and necessary conditions for replication would be included, thus making the case studies particularly useful to States considering adopting new reimbursement methods. The case studies could also explore whether cost shifting

had occurred and/or whether public general hospitals had been adversely affected. There is also an option, of course, of including a quantitative analysis component in the case study methodology to study the fiscal and utilization impact of the methodology in depth.

Case studies would not enable DBS to draw any definitive conclusions about the long-term effects of various hospital reimbursement schemes. At best, case studies could only "suggest" likely effects, based on the limited experience of a few States. To the extent that the case study methodology does not include a quantitative components, conclusions would be based on less than objective analysis and the effects could not be readily quantified for purposes of generalization to other States. However, even if not highly quantitative, case studies would provide some feedback regarding the full range of concerns about the long-term effects of various reimbursement methods, as well as giving DBS a more in-depth understanding of the methods.

Potential Problems

Again, most problems have been alluded to in the section on Methodology or in the Problem section under Short-Term Study Options. They include: (1) availability of data, and (2) problems of correct attribution of fiscal impact, and (3) problems in classification of methodologies.

4.3 Freedom of Choice Waivers

4.3.1 Utility of Research in this Area

The freedom of choice waiver provisions of the 1981 OBRA are intended to allow States sufficient flexibility to take advantage of or to create situations in which services can be purchased on a cost-conscious, prudent-buyer basis. The purchaser of services can be identified as the State (in the base of bulk purchasing and competitive bidding) or the recipient (in the case of enrollment into a case-managed health care plan). Further, the State may set up administrative mechanisms such as lock-in programs or central brokers to facilitate the cost-conscious purchase of care by recipients.

Decisionmaking with regard to these waivers is focused at the State level. The primary decisions the States are facing are:

- Which waiver options should be exercised?

The choice of whether to exercise a specific waiver option depends on the perceived benefit in terms of cost savings and more efficient utilization of resources, the availability and willingness of providers in a given geographic area to respond, and the States' capacity to administer the program.

- What contractual requirements and standards of service should be established for providers of case management and speciality physician services?

Contractual requirements and standards of service must be spelled out sufficiently to identify program goals and expectations, to permit contract enforcement, to minimize fraud and abuse, and to protect recipient rights.

- How can the State establish provider interest and capacity in these areas?
- What criteria or mechanisms should be used to identify efficient and effective providers of care and to restrict recipient purchase of service to these providers?
- What criteria or mechanisms should be used to identify and address problems of recipient and provider over-utilization?

In a recent survey of States' technical assistance needs,* 32 States indicated some desire for information and assistance in the freedom of choice waiver area.

At the Federal level, pending decisions relate to the status of the waiver program, whether the current structure of the program is resulting in the maximum possible benefits, and whether States have created adequate safeguards for recipient and provider rights. Specific decision areas at the Federal level are:

- Should the freedom of choice waiver program be continued and/or written into law?
- Should the criteria determining whether providers are effective and efficient be federally established?
- Are current Federal requirements on the programs which may be established under the waiver program adequate to protect recipient and provider rights?
- What further changes should the Federal government make in current laws and regulation to foster the development of programs under the freedom of choice waiver program?

4.3.2 Evaluation Questions

Seven evaluation questions have been developed to provide information which will be of assistance to State and Federal policymakers in making the decisions listed above. Five have been classified as Primary Questions and two as Secondary Questions.

Primary Questions

The first series of questions is designed to provide descriptive information to the States on the range of options which have been exercised by their colleagues under this program and to help the Federal Government to assess the amount of State interest and therefore the likely impact of this provision of the OBRA.

*Bartlett, op cit.

1. How many States have implemented case management or specialty physician services under the provision? For each State, summarize the annual enrollment goals, services covered, any restrictions on freedom of choice, enrollment or disenrollment requirements and mechanisms, quality assurance mechanisms, utilization review mechanisms, payment mechanisms, risk-sharing provisions, and estimated per capita and aggregate savings per year.

Case management and specialty physicians' arrangements are essentially administrative mechanisms for both ensuring and controlling recipient excess to care. They are likely to be idiosyncratic in their specific provisions; however, research data have shown that the elements on which data are requested are the standard components of such programs and that their proper management is key to the success of a program.

2. How many States have restricted recipients to obtaining services from providers that have demonstrated effectiveness and efficiency under the provisions of the OBRA? For which provider groups has this option been exercised? What criteria or mechanisms have been used to identify efficient and effective providers? For any given class of provider (e.g., hospitals, physician) what proportion of providers have been excluded from the program on the grounds of ineffectiveness or inefficiency?

Again, any use of this provision is likely to be idiosyncratic; that is, there is no generally accepted way to establish effectiveness and efficiency of providers. It is likely to be a political issue within States and to be settled by litigation. The range of options extends from establishing a competitive bidding process for Medicaid contracts, to reimbursing based on some average or standard deviation-related cost or charge figure, to exclusive contracting with governmental facilities. The issue of which providers can be effectively covered by this program is also an area of great interest about which little is currently known.

3. How many States have begun using a locality as a central broker to assist eligible individuals in their choice of plans? Describe the system, intake and referral mechanisms, participating plans, any enrollment and disenrollment requirements and mechanisms, and payment mechanisms.

This provision is designed to accommodate highly specialized situations in which some unit of government chooses to function as a broker (i.e., negotiate pre-payment contracts with health plans, offer enrollment in competing health plans, and assist the consumer to make intelligent enrollment choices). To the project team's knowledge, the only operating broker system is Project Health in Oregon, which covers the medically indigent. However, this project offers an interesting model for States as it is claimed that Project Health allows consumer freedom, makes consumers more involved and sensitive to costs by requiring copayments and premiums, and stimulates competition among health care providers. There is a great deal of interest in whether this model can be replicated in other areas for other populations.

The second series of questions focuses on evaluating the impact of the waiver mechanisms.

4. For States which have implemented case management or specialty physician services, what are the actual savings, per capita and aggregate, per year? What is the explanation of any variance between estimated and actual? What has the change in utilization rates of various services been for the enrolled population?

There are really two separate indicators of use in evaluating savings. One relates to changes in public expenditures when the provider has assumed some risk. If payment to the provider is made on a capitation basis and the provider has assumed some risk, lower public expenditure may result even though the actual cost of care may not have declined. The other indicator, then, is the actual cost of care, based on the amount of change in utilization of various services. If utilization decreases, or if there is a shift from use of more expensive services to less expensive services, there will be an absolute overall reduction in the cost of care. Therefore, the indicators assessed should include both public payment for care and utilization statistics.

5. For States which have restricted recipients to efficient and effective providers, what has been the change in average per capita or per unit expenditure on services from that provider group (controlling for case mix wherever possible)? What, if any, impact has this had on utilization rates? Focus particularly on the provider status and utilization of public general hospitals.

The expectation is that per unit and per capita costs would decline under a restricted provider program. However, the effect of case mix must be controlled for to draw definite conclusions, since intensity of service may change based on physical condition of patients. This is particularly true if eligibility changes are being made concurrently which result in a larger proportion of the recipient population coming from more expensive elderly or disabled groups. Utilization should be monitored since there is a possibility that reductions in cost could be the result of reduced access due to the elimination of a number of providers.

Secondary Questions

6. How many States had lock-in programs or competitive bidding arrangements in place prior to the OBRA? How many have implemented either of these since? Describe the programs, in particular the mechanisms and criteria used to identify overutilizers.
7. What have the savings been from lock-in programs and competitive bidding arrangement, per capita and aggregate?

4.3.3 Assessment of Data Sources

There are three general types of data required: descriptive data, data required to construct the indicators significant to the analysis of freedom of choice waiver programs, and data on exogenous variables.

The specific types of data required are:

- Descriptive data on the programs implemented under provisions of Section 2175 of the 1981 OBRA.

- Statistical data on impact of the implemented programs--pre- and post-implementation utilization rates, expenditures, enrollee and provider participation rates.
- Data on exogenous variables such as case mix.

Exhibit 8 identifies the specific data required in all three categories, identifies and assesses potential data sources, discusses the availability of data, and indicates data sources.

Based on the analysis in Exhibit 8, the following general observations can be made concerning the availability of data to respond to the evaluation questions of interest:

- Information on Waivers Approved under Section 2175 of the 1981 OBRA is immediately available from HCFA Central Office Files and should be timely and complete.
- Information on Impact of These Programs is not available in a consistent fashion through any routine reporting systems. The best that can be hoped is that each approved waiver will include a system for gathering the type of data required for impact analysis.
- Information on exogenous factors is available for some services from the Tape-to-Tape data base. Information for other services would require special studies.

The implications of this for the feasibility of responding to the specific evaluation questions identified are as follows:

- Questions 1-3 (descriptive data on various classes of waivers) can be answered to some degree using data from the waiver applications files at Central Office. However, the degree of detail available from this source is not specifically controlled and may vary significantly from State to State.
- Question 4 (actual savings from case management and specialty physician arrangements) cannot be answered using any currently available data base. Programs would have to be evaluated individually.
- Question 5 (fiscal and utilization impacts of using only effective and efficient providers) can be answered with ongoing HCFA 120 and 2082 data in the case of some provider groups and by use of the Tape to Tape data base in the case of other provider groups. However, if a restriction is in effect on less than a State-wide basis, only Tape to Tape data will be of use.

Exhibit 8

ASSESSMENT OF DATA SOURCES FOR FREEDOM OF CHOICE

DESCRIPTIVE DATA

General Category	Specific Data Required	Potential Sources	Strengths	Weaknesses	Availability	Preferred Source(s)
Descriptive data on programs operating under freedom of choice waiver provisions	For each waiver program (or pre-existing program limiting freedom of choice) as applicable: -Type of program (i.e., case management, specialty physician services, effective & efficient provider, locality as broker) -Providers/services included -Administrative arrangements -Enrollment, intake, and referral mechanism -Quality assurance mechanisms -Risk-sharing arrangements -Other provisions	A. Program Characteristics Data B. HCFA Waiver Files	1. Data State-specific. 2. Computerized. 3. Waiver data linked to other programmatic data.	1. May be discontinued. 2. Not yet clear what data will be extracted on waivers.	1. Will provide data on waiver programs as of February 1982 and possibly prospectively.	X (If complete data are available)
			1. State-specific information. 2. Complete and accurate data. 3. Current.	1. Information in manual form only - must be abstracted. 2. No requirement for cross-State comparability.	1. On-going.	X (If A not sufficient)

STATISTICAL DATA

Indicator	Components	Potential Sources	Strengths	Weaknesses	Availability	Preferred Source(s)
Eligibles covered by program Providers covered by/excluded from program Estimated and actual savings Utilization rate changes	<p>For each waiver program:</p> <ul style="list-style-type: none"> -Medicaid eligibles covered/enrolled by group -Providers included/excluded from participation -Estimated costs in the absence of the program by service and provider types o total o per capita -Estimated costs with the program by service and provider types o total o per capita -Actual costs with the program by service and provider type o total o per capita -Utilization statistics by service and provider type 	<p>A. HCFA Waiver Files and Reports</p>	<ol style="list-style-type: none"> 1. State-specific data. 2. Probably the only data available on any of these items. 3. Waiver application should contain estimates needed. 	<ol style="list-style-type: none"> 1. Information in manual form only. 2. No assurance of comparability across States 3. No requirement that all needed elements will be available. 	1. On-going.	X (May not be very productive data source)

4.3.4 Short-Term Study Options

The limited availability of appropriate data places some significant constraints on the amount of short term research and evaluation work which can be done in this area. DBS could, however, undertake a study identifying those States which had exercised options under this waiver program and describing the programs which resulted and their goals.

The specific objectives of the study would be to:

- Identify how many States have implemented case management, specialty physician services, restriction of recipients to efficient and effective providers, or use of a locality or a central broker
- Describe the programs in terms of their most important component
- Identify the specific waivers requested and approved

The study would summarize for Federal policymakers the response of States to flexibility in this program area and would give States information on the range and characteristics of programs implemented.

Methodology

This study would be primarily descriptive and would be based heavily on waiver application materials, supplemented by telephone inquiries as needed to States which had exercised a waiver option. The specific tasks required would be:

- To determine the specific information desired for each major class of waivers
- To review approved waiver applications to obtain whatever data are available from that source
- To telephone or write to specific States to obtain any additional information required

In addition, States have indicated they would find it helpful if reasons for rejection of disapproved waivers were publicized to aid them in defining the range of permissible options.

Possible Problems

There are no particular problems foreseen in accomplishing a descriptive study of this limited scope.

4.3.5 Long-term Study Options

The objectives of long-term research and evaluation efforts in the area of freedom of choice would be to determine the impact of specific waiver programs on utilization and cost. These objectives could be met by two long-term studies. The first would utilize HCFA 2082 and 120 data and data from the Tape-to-Tape project to respond to Evaluation Question 5.

The study would specifically:

- Describe changes in the utilization of services after restricting recipients to efficient and effective providers,
- Describe changes in the average cost per unit for the restricted services, and
- Describe the aggregate cost impact of the restriction.

The second study would consist of a series of special studies in various states and would respond to Question 6. The purpose of this study would be to:

- Determine the per capita and aggregate annual savings resulting from case management and specialty physician arrangements, and
- Determine the changes in utilization rates of various services for enrolled populations.

Because currently available HCFA data bases do not include sufficient detail on enrolled populations this study would have to include original data collection efforts.

Methodology

The first step in the study of the impact of restricting recipients to efficient and effective providers (Question 5) is to choose the waiver program(s) to be evaluated.

States may choose to apply restrictions to any group of providers; however, the limitations are most likely to apply to

institutional providers - hospitals and nursing homes. Data on utilization of these services are provided by the HCFA 120 and 2082 data bases on an ongoing basis for all States, as is utilization data on physician or pharmacy programs. Therefore, any State having a waiver program affecting these services can be chosen as a site for evaluation as long as the restriction is applied on a state-wide basis. The ability to evaluate utilization of other services (home health, dentists, transportation) depends on the availability of Tape-to-Tape data since utilization data for these services is only available from that source. The number of States currently supplying Tape-to-Tape data is extremely limited, and therefore so are the potential evaluation sites.

Once the program(s) to be evaluated are selected, the next step is to fully describe the criteria used to identify effective and efficient providers and to describe the providers retained and rejected in terms of their relevant characteristics (in the case of hospitals, for example, bed size, teaching versus non-teaching status, medical centers versus non, full service versus limited, type of ownership, geographic location, payor mix) and to show any significant differences which exist between the two groups. Next, utilization data for the services being studied should be analyzed in detail, by groups, using pre and post-restriction comparisons or interrupted time series analysis. Both per capita utilization and the number of recipients as a percentage of eligibles should be reviewed to identify whether both individual utilization has been affected and whether more or fewer individuals are using services.

Any exogenous variables which could have affected utilization must also be examined and their impact must be accounted for.

Cost data should also be examined in detail using the same techniques as for utilization data. The exogenous variables examined must include the general level of inflation in cost of services and, in the case of aggregate expenditures, caseload increases or decreases.

The first step in the study of the fiscal and utilization impact of case management and speciality physician arrangements (Question 6) would be to select a number of such programs for evaluation. Selection could be made using program characteristics criteria (such as payment method, degree of control by the primary physician, or service package) or more practical criteria such as size of enrolled population or availability of data.

Each program should be evaluated by using either pre/post comparisons of the enrolled populations' utilization and costs of care or by comparing the utilization and cost of those enrolled in such a program with the utilization and cost of a comparable group. The pre-enrollment or comparable group utilization and cost data should be available through the Tape-to-Tape data base or directly from the State claims processing system, as would post implementation data for any services not capitated under the waiver program and any "out of plan" services received. However, claims data for any capitated services would not be available and might have to be retrieved from the medical records, unless the State had required that detailed utilization data be separately maintained. The analyses of interest are those which would determine the change in per capita utilization for each service covered by the arrangement, resulting change in overall per capita cost of care, and the amount of savings realized by the State as a result of the arrangement.

Potential Problems

There is a problem of interpretation in examining changes in utilization. Decreased utilization, once controlled for caseload changes, can result from several causes: underserving, lack of access to care, changes in medical practice or morbidity, seasonal variation, or a shift to more appropriate levels of care. Some of these are not likely to occur over a relatively short period. Others (seasonality) can be controlled by sampling from an appropriate time period. Case mix can only be dealt with by

controlling for diagnosis or procedure (information which is not always available and which requires person level records). The question of underserving and lack of access can be dealt with in one of two ways: concurrently, through an examination of medical records, monitoring of other services for substitution effect, and patient grievance procedures; or retrospectively, through monitoring of health status indices such as days of disability, infant mortality, etc.

The need to evaluate and isolate all of the potential impacts listed above greatly complicates the evaluation plan. However, no definitive findings can be made in the absence of such controls.

4.4 Copayments

4.4.1 Utility of Research and Evaluation in this Area

Establishing copayments for a broad variety of services and different populations has become an agenda item for both the State and Federal governments, primarily as an incentive to more cost-conscious utilization of services by recipients. Policymakers at all levels are facing three major decisions in regard to the imposition of cost sharing:

- On what services or mix of services should copayment be imposed?

Copayments are generally thought of as incentives to more appropriate utilization. In designing copayment programs, care must be taken not to create incentives to utilization of even less appropriate services, as in the substitution of emergency room for physician care.

- What level of copayment should be established on a given service?

The correct answer to this question is based on the complex interaction between the level of copayment, utilization of the service, the use of related services, and the long-term impact of reduced utilization of a given service. A related factor is the degree to which copayments may cause cost-shifting to provider through imposition of an administrative burden.

- To what degree should copayments vary for different populations?

A particular level of copayment on a given service will have differential effects on various populations because of their differing levels of utilization of services and because the State may have different income, asset, and disregard policies for various groups, which result in different levels of disposable personal income.

The budget currently before Congress contains an Administration proposal to impose standard national copayments, including, for the first time, copayments on mandatory services for the categorically needy. Congress wishes to evaluate both the Administration's

proposal and also requests by the states to broaden their flexibility with regard to the imposition of copayments. States are interested in targeting copayments very specifically; for example, imposing copayments only on emergency room use instead of on all out-patient hospital services, and exempting the institutionalized population from a copayment requirement on prescription drugs.

States also face a variety of decisions related to their current option to impose nominal copayments on optional services for all recipients and on mandatory services for the medically needy.

4.4.2 Evaluation Questions

Nine evaluation questions have been developed to assist in decision-making regarding copayments. Four of these have been classified as Primary Questions and five as Secondary Questions.

Primary Questions

The first question is designed to summarize the current status of copayments in the Medicaid program and to identify states which have had copayment experience which could be studied in order to respond to the other research and evaluation questions.

1. Describe the recent history of copayments in the Medicaid program. List which states have imposed copayments, the dates copayments became effective, and the services, populations, and amounts involved. How many states have discontinued or changed copayment or changed the levels of copayment required? What is the current pattern within and across states?

Questions 2-4 focus on identifying the short-term impacts of copayment on utilization and expenditures.

2. What is the differential impact of various levels of copayment on utilization of a given service and related services (controlling for changes in the eligible population and for benefit limits)?
3. Is there a differential impact on preventive care or on certain classes of drugs?
4. What are the likely net savings to a state of various levels of copayment for a given service?

Question 2 focuses on the utilization impact of the copayment on both the service which requires copayments and on related services. There is a potential for substitution of one type of service for another in third party financed health care systems. As a service with a copayment requirement becomes relatively more expensive for recipients, they may shift their demand to other types of care. This may be acceptable, as when physician visits are substituted for emergency room care, or unacceptable, as when inpatient care is substituted for outpatient care. Any copayment requirements must be evaluated in terms of their system effects and copayment requirements should be structured to provide incentives to less costly, as well as more necessary, care.

Question 3 represents an initial examination of whether there may be a negative long-term impact of a particular level of copayment on a given service. There is some fear, with some justification in results of prior research, that preventive and maintenance care will be deferred, leading to the need for more acute care in the long term.

Secondary Questions

This series of questions addresses the issues of the exact source of savings realized from the imposition of copayments, the impacts on various populations and provider groups, and the long-term health status effects.

5. What percentage of the net savings realized comes from net decreased utilization and what percentage from reductions in rate of reimbursement?
6. What percentage of the providers actually collect the copayment? Is there any shift towards utilizing providers who do not collect the copayment?
7. Does the utilization impact vary between various eligibility groups and income levels?

8. What is the impact on providers on various copayment or co-insurance programs in terms of administrative burden, financial loss, and ultimately, participation?
9. What is the impact on health status of any reduction in services related to the copayment requirement?

4.4.3 Assessment of Data Sources

There are three general types of data required to answer Questions 1-4: descriptive data, statistical data required to construct the indicators significant to the analysis of copayment programs, and data on exogenous variables. The specific types of data required are:

- Descriptive data on State copayment programs.
- Statistical data on utilization rates by service.
- Statistical data on expenditure rates by service.
- Data on exogenous variables such as covered benefits and benefit limits.

Exhibit 9 identifies the specific data required in all these categories, identifies and assesses potential data sources, discusses the availability of data, and indicates preferred data sources.

Based on the analysis in Exhibit 9, the following general observations can be made concerning the availability of data to respond to the evaluation questions of interest:

- Information on Copayment Programs is available to some degree from a variety of sources. The Program Characteristics data base can provide data as of February 1982. For prior periods, the NGA and IGHPP reports will be helpful.
- Information on Medicaid Utilization and Expenditures is available from two ongoing Federal data bases. The HCFA 120 and 2082 data bases are appropriate for gross level analysis; the Tape-to-Tape data base is the preferred source of detailed data and the only source of data on utilization and expenditures for certain types of services.
- Information on Exogenous Factors is available from the Program Characteristics Data Base.

Exhibit a

Assessment of Data Sources for Copayments

DESCRIPTIVE DATA

General Category	Specific Data Required	Potential Sources	Strengths	Weaknesses	Availability	Preferred Source(s)
State co-payment programs	For each service on which a co-payment has been required during reference period	A. Program Characteristics Data	1. Provides data on a State-by-State basis. 2. Computerized.	1. May be discontinued.	1. Will provide data for February 1982 and possibly prospectively.	X
	- date(s) implemented - groups covered - amount of co-payment for each group	B. Data Systems maintained by NGA and IGHP	1. Provides State-level data. 2. Updated on a regular basis. 3. Most complete source prior to February 1982.	1. No baseline data 2. Less reliable and complete than A. 3. May be discontinued.	1. NGA data covers July 1978-July 1981. Quarterly update planned. 2. IGHP data covers 1981 proposed changes. Update schedule unclear.	(As necessary retrospectively to augment A)

STATISTICAL DATA

Indicators	Components	Potential Sources	Strengths	Weaknesses	Availability	Preferred Source(s)
Per capita utilization and per capita expenditures within eligibility group - by category of service - by individual service	Number of eligibles by group utilization statistics by service and eligibility group Expenditures by service and eligibility group	A. HCFA 120 (monthly) HCFA 2082 (annually)	1. Data are State-specific. 2. Monthly, quarterly and annual totals. 3. Comprehensive: almost all States for almost all time periods.	1. Timeliness, accuracy, and completeness have been problems in past; currently improving. 2. Cannot provide data on all services due to aggregation. 3. Cannot provide data on medically needy population for periods prior to FY 80. 4. Cannot disaggregate services within categories on basis of presence and/or amount of co-payment. 5. Data, except for eligibility data, are all for month or year of payment not service. 6. No eligibility counts are available on the annual data (2082). 7. Data available only for highly aggregated eligibility categories.	1. 2082 - Ongoing. Hard copy available after close of Federal FY; tapes and published data considered ably later. 2. 120 - Ongoing. Hard copy available one month after reporting period. Currently 15-month lag in computerizing data.	X (For per capita utilization and expenditure data on certain gross categories of eligibility.)
		B. Tape-to-Tape	1. Person based unit records. 2. Reliable data taken from State paid claims tapes. 3. Provides utilization and expenditure data on all services. 4. Provides data on all eligibility groups.	1. Five State, two year data base (FY 80-81) at present. 2. May not be expanded or continued.	1. 1980-81 data in 1983. Subsequent availability based on level of funding.	X (For utilization and expenditure data for more specific eligibility categories than those covered in HCFA 120 and 2082.)
		C. INQUIES	1. Person-based data. 2. Combines self-report with eligibility claims records. 3. Identifies Medicaid plus out-of-pocket and other 3rd party payments. 4. Identifies detailed eligibility categories for 4 State sample.	1. National data plus 4 State Medicaid sample. 2. One year only (1980). 3. May not be repeated. 4. Excludes institutional persons.	1. 1980 data in 1983. 2. Preliminary data in 1982.	

Exhibit 9
(continued)

STATISTICAL DATA

Indicators	Components	Potential Sources	Strengths	Weaknesses	Availability	Preferred Source (s)
	D. MQC		<ol style="list-style-type: none"> 1. Case and person-based. 2. Very reliable data. 3. Contains detailed eligibility data. 4. Contains data on third party liability. 5. Spend-down information. 6. Cross-program data. 7. Samples represent State Medicaid populations. 8. Includes both institutionalized and non-institutionalized. 9. Includes every State and Territory. 	<ol style="list-style-type: none"> 1. Sample sizes small for any substantive analyses. 2. Excludes "State-only" recipients. 3. Some States have separate samples for eligibility versus utilization and expenditures. 4. Service detail on claims records is limited. May not correspond to service categories subject to co-payments. 5. Includes services only if claim processed within four months of review month. 6. No provider participation data. 	1. 6 months after close of semi-annual periods.	

Exhibit 9
(continued)

EXOGENOUS VARIABLES

Variable	Potential Sources	Strengths	Weaknesses	Availability	Preferred Source(s)
Medicaid Program Characteristic - Covered Benefits - Benefit Limits	<p>A. Program Characteristics Data</p> <p>B. Data Systems maintained by NGA and IGHP</p>	<p>1. Provides data on a State-by-State basis.</p> <p>2. Computerized.</p> <p>1. Provides State-level data.</p> <p>2. Updated on a regular basis.</p> <p>3. Most complete source prior to February 1982.</p>	<p>1. May be discontinued.</p> <p>1. No baseline data</p> <p>2. Less reliable and complete than A.</p> <p>3. May be discontinued.</p>	<p>1. Will provide data for February 1982 and possibly prospectively.</p> <p>1. NGA data cover July 1978-July 1981. Quarterly update planned.</p> <p>2. IGHP data cover 1981 proposed changes update schedule unclear.</p>	<p>X</p>

The implications of this for the feasibility of responding to the evaluation questions are as follows:

- Question 1 (history and status of copayment programs) can be answered using a mixture of the Program Characteristics data base and the NGA and IGHPH reports.
- Questions 2 and 4 (impact on utilization and expenditures and net savings) can be answered using data from either HCFA 2082 and 120 data and/or the Tape-to-Tape project, depending on the level of detail required. The limited number of States and time periods covered by Tape-to-Tape creates some constraints.
- Question 3 (differential impact on certain types of care) can be answered for the States contributing to the Tape-to-Tape data base and implementing copayment requirements after the initial year of Tape-to-Tape availability.

4.4.4 Short-term Study Options

Any study of the impact of copayments should focus on the services and population of interest to policymakers. The services which are of greatest interest are the mandatory services, especially physician, outpatient hospital, and emergency room services; the population of greatest interest is the categorically needy. There has not been much copayment experience with these services and populations to date; however, several States are currently participating in the development of Section 1115 waiver research and demonstration projects with copayments for these services and populations and the Administration has proposed to require copayments for these services and groups.

In the short term, DBS should focus on a critical review of the literature and research on copayments to date and on completing a detailed design for a long-term study, the objectives of which would be to describe the pattern of copayments across States, to determine the impact of copayment implementation on the utilization of a given services, to identify related services and determine the impact of

copayment implementation on them, and to determine the differential impact of various levels of copayment, any differential impact by type of care, and the net savings achievable from a given level of copayment on a given service.

Methodology

The goal of a critical literature and research review would be to summarize and evaluate the results of past evaluation work and to provide guidance to Federal and State policymakers and to researchers. The first step should be to identify and gather all existing research and evaluation literature, including those prepared internally by States. Next, the methodologies employed should be critically reviewed. Finally, a judgement should be made regarding the reliability of research findings. The results of this effort should be summarized and made available to State and other interested policymakers.

Following the literature review, a detailed study design for further research and evaluation should be developed. The preparation of a study design would require the following:

- Articulation of the objectives of the research
- A definition of the baseline and evaluation time period
- Criteria for the selection of the program(s) to be evaluated
- The completion of a design for analysis
- A plan for dealing with any anticipated methodological or data problems
- An enumeration of the data elements which will be required
- An evaluation of the availability of the data required

The evaluation time period must be long enough to identify both short-term utilization impacts and long-term substitution effects. For example, a short-term drop in out-patient hospital service use may lead to a long-term substitution of emergency room or inpatient services. It is likely that a series of observation points will prove most useful.

Criteria for selection of programs to be evaluated should include the availability of data and the length of time copayments have been in effect. This information can be obtained from the Program Characteristics Data Base.

The methodology should, at a minimum:

- Identify the baseline utilization of the services for which a copayment requirement has been imposed and of related services.
- Analyze the impact of the implementation of the copayment requirement using pre- and post-implementation observations or interrupted time series techniques. Both per capita utilization changes and changes of the percent eligibles receiving service should be analyzed, for both services requiring copayments and related services.
- Control for the change in utilization by factors other than the copayment requirement through the use of multiple regression techniques.
- Convert the net copayment impact into short-term and long-term savings.

The issue of the differential impact of various levels of copayment creates a new set of methodological problems. There are two basic approaches possible: one is to identify one or more States which have changed the level of copayment required over time and to track the impact (controlling for the effects of any concomitant changes in income levels); the other is to identify several States with comparable populations and baseline utilization and different levels of copayment on a given service and to identify any relative differences in the rates of utilization after implementation.

The number of States which change level of copayment will be limited; on the other hand, there are tremendous problems inherent in trying to establish comparability across States. Another approach might be to examine the differential impacts on utilization in States with sliding copayment requirements which vary with income.

As outlined in the Data Assessment section, utilization data are available for some services through the HCFA 120 and 2082 data base. However, because the data are reported at an aggregate level, it is difficult to utilize regression controls to determine the influence on utilization of variables other than copayment (such as case mix changes). Therefore, the Tape-to-Tape data base offers more chance for control of data and therefore increased reliability of findings. Further, the Tape-to-Tape data base is the only source of utilization data on some services.

Potential Problems

Most of the problems have been outlined in the section on Methodology. They include: the need to design a methodology which adequately controls or evaluates the impact of exogenous factors such as seasonality, case mix, benefit packages and limits, the need to use the appropriate data base for the level of detail required, the need to take into account long-term and substitution effects as well as direct utilization effects, and problems with availability of data due to the current limited scope of the Tape-to-Tape project.

4.4.5 Long Term Study Options

Research and evaluation work on copayments over the long term should involve the application of the research methodology developed in the short-term study to available data.

4.5 Family Responsibility

4.5.1 Utility of Research in this Area

The current Administration has proposed as part of its FY 1983 budget package to provide States with greater flexibility in imposing family responsibility requirements on the adult children of Medicaid recipients. This proposal is representative of growing interest in expanding Medicaid family responsibility provisions as a cost-containment tool. Major decision areas include:

- Should Medicaid broaden its definition of family responsibility?

If it appears that substantial savings could be realized by implementing a broader definition of family responsibility and if it appears administratively feasible to do so, there will be continued interest in expanding State flexibility in this area.

- How should a broader family responsibility program be designed and implemented?

A major impediment to the consideration of expanding family responsibility provisions is the administrative complexity to such an effort. Areas of difficulty include: determination of ability to contribute of family members, methods to enforce contributions, and legal barriers to implementation.

To act wisely upon these decisions, policymakers need detailed information to identify the likely savings from a change in definition of family responsibility and analysis of the pros and cons of various implementation scenarios.

4.5.2 Evaluation Questions

Three primary questions have been developed to collect evaluation information helpful to policy decisions on family responsibility. Question 1 calls for a historical analysis of State family responsibility provisions. In the 1960's and early 1970's many States required adult children to contribute to the costs of

care for recipients of welfare and/or medical assistance. A review of the models used by these State programs would be helpful to guide current decisionmaking.

1. What is the history of family responsibility legislation and programs at the State level?

To help policymakers develop an optimal approach to implementing family responsibility provisions, Question 2 calls for study of various design and implementation options.

2. What are the problems and options in the design and implementation of a family responsibility program?

Question 3 focuses on the development of information to assist in better estimating the savings that might be realized from strong family responsibility requirements.

3. What is the potential for cost savings through a family responsibility program? How many institutionalized recipients have relatives who might potentially contribute toward the cost of health care? What is known about the resources of these relatives?

This question is focused on the institutionalized Medicaid population because these are the most expensive cases; also, current family responsibility rules are less stringent for the institutionalized than the non-institutionalized.

4.5.3 Assessment of Data Sources

There are two general types of data required:

- Descriptive data on program history and design options.
- Statistical data on the Medicaid institutionalized population, their families, and on available resources.

None of the data bases examined as part of this project contain any of the required data.

The implications of this for the feasibility of responding to the specific evaluation questions identified can be summarized as follows:

- Questions 1 and 2 (history and program design) can only be answered by a special study.
- Question 3 (cost savings potential) may be able to be partially answered by use of a number of miscellaneous data bases from which inferences could be drawn. However, any definitive response could probably require both an original data collection effort and construction of a model of family behavior in response to family responsibility requirements.

4.5.4 Short-term Study Options

Within an eighteen-month period, a study could be undertaken and completed to respond to Questions 1 and 2. The purpose of such a study would be to review the history of family responsibility programs and to outline the decisions required and the options present in the design of such a program.

Methodology

A comprehensive review would first document the history regarding family responsibility requirements among States and discuss the legal obstacles to the derivation of a workable policy. Second, various States' practical experiences with attempts to implement a family responsibility requirement would be described and evaluated. The review would analyze the techniques developed in other programs as models for computing family financial responsibilities (e.g. the "deeming" process under the SSI program and the process used to determine child support contributions). Incentive effects likely to be produced by alternative family responsibility "models" would be examined, such as whether financial incentives were compatible with appropriate long term care placement. And finally, the review could make some evaluative judgments as to which models seemed most effective for increasing informal caregiving without undermining natural family commitments. Hopefully, needed information from States could be collected through a telephone/mail survey.

Potential Problems

There are no serious problems foreseen in pursuing such a study.

4.5.5 Long-term Study Options

A long-term study could be designed and undertaken which would analyze the amount of savings available through alternative family responsibility programs for institutionalized Medicaid recipients. This study would build upon the models developed in the short-term study and attempt to assess what the impact of implementation of family responsibility might be. A key part of the study would be obtaining detailed data on the number and resources of relatives who are potential contributors toward the care of institutionalized recipients.

Methodology

The long-term study should commence with a review of available data, drawing on the work done as part of the short term study described above. Potential data sources include the Survey of Institutionalized Persons, data from States on their prior experience with family responsibility programs, and feasibility studies undertaken by States in conjunction with their internal planning for family responsibility programs.

The type of information sought for each institutionalized Medicaid recipient would include data on the number, age, living situation and income of potentially responsible relatives (parents, spouse, adult children, adult grandchildren). In addition, data on State of residence of family members and degree of contact with the recipient would be desirable.

An assessment should be made of the adequacy of existing data versus the cost and administrative complexity of an original data collection effort. Should existing data be judged inadequate and an original data collection effort be the course of action chosen, the next steps would be to define the data requirements, design a survey instrument, design a sampling methodology and data validation

procedures, and conduct the survey. Consideration might be given to developing a cooperative relationship with a State which would be interested in participating in the study and serving as a primary data collection site.

Whatever the data source, analysis of the data should focus on:

- Describing the problems involved in identification and location of family members (which are also likely to be encountered by States enforcing a family responsibility policy);
- Describing the families of institutionalized recipients in terms of age, living situation, disposable income, state of residence, and contact with recipient; and
- Calculating the maximum amount of revenue which could result from a given model of family responsibility, along with some estimate of the cost of collection.

Potential Problems

Because there has been relatively little experience with family responsibility programs, and because the issue is enormously sensitive politically, there will be much discussion of issues such as how to define "family", what measure of family income should be used, and how an equitable contributory amount should be calculated. For this reason and to maximize the utility of results, the study should be guided by an advisory board composed of administration and legislative officials from several States, who could agree on definitions and one or more sets of program assumptions which reflect administrative and programmatic realities.

A second potential problem is that there are likely to be serious if not insurmountable problems encountered in attempting to obtain any income and resource data from the extended family of institutionalized Medicaid recipients.

Finally, any analysis of impact of family contribution is going to require a series of qualitative judgments and speculation on the alternative uses of contributed funds and the overall cost-benefit differences. These are extremely difficult analytical problems which are not easily solved.

4.6 Eligibility

4.6.1 Utility of Research

With medical costs rising, both the Federal and State governments will continue to face major eligibility policy decisions for Medicaid. Who will receive services is clearly a significant determinant of program expenditures.

There are many components to eligibility policy. Each component will be scrutinized as policymakers struggle to balance the objectives of equity and incentives with the objective of cost containment. Decisions likely to be faced at the Federal level include:

- Whether to expand State flexibility in Medicaid eligibility even more (along the lines of the 1981 OBRA), or to move toward more standardized coverage policies nationwide.
- Whether to continue the current configuration of groups States can elect to make eligible for Medicaid coverage.
- Whether to further regulate the financial criteria used by States for eligibility determination.
- Whether to alter the parameters of other eligibility criteria imposed upon the States, such as accounting periods, length of eligibility, transfer of assets policies, etcetera.

Since States have considerable flexibility (within Federal options and guidelines) to specify the eligibility policies actually used, they face similar decisions: whether to add, alter or eliminate coverage groups; where to set financial levels; and how to select among other eligibility criteria.

For all of these decision areas, baseline information and analysis are needed to enable policymakers to better understand the likely impacts of their decisions -- how many poor people will be affected and what the savings (or cost) will be.

4.6.2 Evaluation Questions

Seven evaluation questions have been developed to address policy concerns about eligibility. Most of the questions relate to

better understanding the variation in eligibility policies currently in place among States and the effects of these policy differences on program costs. Fundamental to the development of these questions is the reality that little information has been available in the past on detailed State eligibility policies. Even less has been known about the relationship between Medicaid costs and eligibility decisions at either the Federal or State levels. Thus, the questions, for the most part, call for baseline descriptive information and analysis. It is important to recognize that obtaining answers to these basic questions would be a significant accomplishment.

Primary Questions

To begin with, data are needed on what State eligibility policies were before the OBRA and how they have changed since then. Basic descriptive data are required on all aspects of State eligibility policies so that State variation along this important policy dimension can be accurately accounted for.

1. Describe State Medicaid programs, prior to the OBRA and currently, according to their eligibility characteristics. Which States cover the various optional categorically and medically needy groups? What are the associated income and asset levels? Describe State variations in the treatment of SSI recipients.

Since OBRA imposed some direct restrictions on eligibility and increased State flexibility to impose further restrictions, information is needed on the success of these changes in reducing costs. Question 2 focuses on OBRA eligibility effects.

2. How have States changed their eligibility policies as a result of passage of the Reconciliation Act? How many have used new OBRA options? Who are the "winners and losers" from OBRA with respect to eligibility? How many recipients have become ineligible by State as a result of OBRA? How great have the cost savings been?

Question 3 calls for information on the utilization and cost patterns of various eligibility groups within and across States.

Analysis is also needed on the effects of other broad eligibility-related program characteristics on enrollment and cost.

3. What are enrollment, utilization and Medicaid expenditure patterns of various eligibility groups (by category) within and among States, controlling for benefits to the extent possible? Are there consistent differences between groups? Do other eligibility-related program characteristics of States (such as treatment of SSI cases, income levels, breadth of group coverage) appear to affect enrollment for AFDC, utilization and cost patterns? What are Medicaid cost implications of adding or eliminating various eligibility groups, or modifying other eligibility factors?

Eventually, it would be desirable to be able to understand the enrollment and cost effects of all the intricacies of eligibility policy. However, given the current lack of information and understanding of broad eligibility effects, such questions will be more complicated to address. Question 4 indicates more specific eligibility factors policymakers would like to have analyzed. They relate to "fine-tuning" eligibility policies:

4. Analyze Medicaid utilization and expenditure patterns, controlling for other eligibility-related factors such as income, asset levels, disregards, work expenses, age and living arrangements. What are the Medicaid cost implications of these factors?

Answers to Questions 3 and 4 are critical to future efforts to contract or expand eligibility coverage. Without data linking costs to eligibility options, it is impossible to predict the effects of policy changes.

Concern has always been expressed about the health care of poor people not covered under Medicaid, yet little is known about the State and local resources being used to provide such coverage. When decisions to restrict eligibility are under discussion, policymakers need to understand better whether cost savings will be real or merely result in shifts to other funding sources. They also need data on the adequacy of current eligibility coverage relative to the health care needs of the broader low income population. Question 5 addresses these concerns.

5. What health care (including public general hospitals) is provided by State and local governments to low-income persons who are not eligible for Medicaid? Who is providing health care to former Medicaid recipients made ineligible by Reconciliation Act changes?

4.6.3 Assessment of Data Sources

There are four specific types of information needed to answer the eligibility-related evaluation questions:

- Descriptive data on State Medicaid program characteristics relevant to eligibility.
- Descriptive data on State-only health care program characteristics and utilization data on enrollees.
- Statistical data on Medicaid enrollment, utilization and expenditures by State.
- Data on the amount, duration and scope of Medicaid benefits by State to use to control for exogenous factors.

Exhibit 10, which follows, identifies the data required and assesses potential data sources.

Based on the analysis in Exhibit 10, the following general observations can be made concerning the availability of data to respond to the evaluation questions of interest:

- Information on State eligibility requirements in detail is available from the State Program Characteristics Data Base for February 1982. Other potential sources do not include all of the needed data, but can be used to a limited extent for pre-1982 information.
- Information on State-only health care programs is available to a limited extent on utilization; however, overall descriptive information on the characteristics of such programs is not presently available and would require a special study to collect.
- Information on Medicaid enrollment, utilization and expenditures on a fairly gross level is available from the HCFA 120/2082 data. To obtain any detailed data requires use of either the Tape-to-Tape or MQC data bases.
- Information on State Medicaid Benefits is readily available from the Program Characteristics Study. Other sources include only some of the needed data.

Thus, it seems feasible to address Evaluation Questions 1-4 (description of eligibility requirements and their relationship to

Exhibit 10

ASSESSMENT OF DATA SOURCES FOR ELIGIBILITY

DESCRIPTIVE DATA

General Category	Specific Data Required	Potential Sources	Strengths	Weaknesses	Availability	Preferred Source (s)
State eligibility requirements	Coverage of optional groups Presence of medically needy program Income levels Asset limitations SSI provisions	A. Program Characteristics Data	1. Provides data on a State-by-State basis. 2. Computerized.	1. May be discontinued.	1. Will provide data for February 1982 and possibly prospectively.	X
		B. Data Systems maintained by NGA & IGHP	1. Provides State-level data. 2. Updated on a regular basis. 3. Must complete source prior to February 1982.	1. No baseline data. 2. Less reliable and complete than A. 3. May be discontinued.	1. NGA data covers July 1978-July 1981. Quarterly update planned. 2. IGHP data covers 1981 proposed changes.	(As needed retrospectively to augment A)
State-only health care program characteristics	Information on eligibility requirements, services, enrollment and expenditures	A. NMCUES	1. Person-based data. 2. Combines self-report of utilization and expenditure including State-only programs, with eligibility/claims records. 3. Detailed State-only data for 3 States.	1. 3 State sample of State-only program. 2. One year only (1980).	1. 1980 data in 1983. 2. Preliminary data in 1982.	X (to look at utilization and expenditures)
		B. Special Studies	1. Not reviewed.	1. Not reviewed.	1. Not available	X

STATISTICAL DATA

Indicators	Components	Potential Sources	Strengths	Weaknesses	Availability	Preferred Source(s)
Enrollment, per capita utilization and per capita expenditures	Number of eligibles by group or eligibility factor	A. HCFA 120 (monthly) HCFA 2082 (annually)	1. Data are State-specific. 2. Monthly, quarterly and annual totals.	1. Timeliness and completeness have been problems in past; currently improving.	1. 2082 - Ongoing. Hard copy available after close of Federal FY; tapes and published data considerably later.	X (For per capita utilization and expenditure data on certain gross categories of eligibility)
- by aggregated eligibility classes	Utilization statistics by eligibility group or eligibility factor	3. Reliable as any data taken from State claims processing systems.		2. Cannot provide data on medically needy population for periods prior to FY 80.	2. 120 - Ongoing. Hard copy available one month after reporting period. Currently 15-month lag in computerizing data.	
- by individual eligibility	Expenditures by eligibility group or eligibility factor			3. Data, except for elig. data, are all from month or year of payment, not of service.		
- by individual eligibility factors, including income, assets, disregards, work expenses, age and living arrangements				4. No eligibility counts are available on the annual data (2082).		
				5. Data available only for highly aggregated eligibility classes.		
		B. Tape to Tape	1. Person based unit records. 2. Reliable data taken from State paid claims tapes. 3. Provides utilization and expenditure data on all services. 4. Provides data on all eligibility groups. 5. Includes institutionalized and non-institutionalized.	1. Five State, two year data base (FY 80-81) at present. 2. May not be expanded or continued.	1. 1980-81 data in 1983. Subsequent availability based on level of funding.	X (For utilization and expenditure data for more specific elig. categories than those covered in HCFA 120 and 2082)
		C. NMCUES	1. Person-based data. 2. Combines self-report with eligibility/claims records. 3. Identifies Medicaid out-of-pocket and other 3rd party payments. Detailed elig. data for 4 State sample.	1. National data plus 4 State Medicaid sample. 2. One year only (1980). 3. May not be repeated. 4. Excludes institutional persons. 5. Detailed eligibility group samples too small to analyze at State level.	1. 1980 data in 1983. 2. Preliminary data in 1982.	

STATISTICAL DATA

Indicators	Components	Potential Sources	Strengths	Weaknesses	Availability	Preferred Source(s)
	D. MQC		<ol style="list-style-type: none"> 1. Case and person-based. 2. Very reliable data. 3. Contains detailed eligibility data. 4. Contains data on third party liability. 5. Spend-down information. 6. Cross-program data. 7. Samples represent State Medicaid populations. 8. Includes both institutionalized and non-institutionalized. 9. Includes every State and Territory. 	<ol style="list-style-type: none"> 1. Sample sizes too small for any sub-state analyses. 2. Excludes "State-only" recipients. 3. Some States have separate samples for eligibility versus utilization & expenditures. 4. Service detail on claims records is limited. May not correspond to service categories of interest. 5. Includes services only if claim processed within four months of review month. 6. No provider participation data. 	<ol style="list-style-type: none"> 1. 6 months after close of semi-annual periods. 	<p>X</p> <p>(For utilization and expenditure data for more specific eligibility categories than those covered in HCFA 120 and 2082)</p>

EXOGENOUS VARIABLES

Variable	Potential Sources	Strengths	Weaknesses	Availability	Preferred Source(s)
Medicaid program characteristics by State	A. Program Characteristics Data	<ol style="list-style-type: none"> 1. Provides data on a State-by-State basis. 2. Computerized. 	<ol style="list-style-type: none"> 1. May be discontinued. 	<ol style="list-style-type: none"> 1. Will provide data for February 1982 and possibly prospectively. 	X
- Benefits covered - Benefit limits - Eligibility categories covered	B. Data Systems maintained by NGA and ICHPP	<ol style="list-style-type: none"> 1. Provides State-level data. 2. Updated on a regular basis. 3. Most complete prior to February 1982. 	<ol style="list-style-type: none"> 1. No baseline data. 2. Less reliable and complete than A. 3. May be discontinued. 	<ol style="list-style-type: none"> 1. NGA data covers July 1978-July 1981. Quarterly update planned. 2. ICHPP data covers 1981 proposed changes. Update schedule unclear. 	(As needed, retrospectively to augment A)

Medicaid utilization and expenditure patterns) with available data bases. A limited analysis of Evaluation Question 5 (provision of health care by State and local governments) can be undertaken, but a comprehensive response would require a special data collection effort.

4.6.4 Short Term Study Options

All of the analysis required to answer Evaluation Questions 1-4 for eligibility could be undertaken within the next eighteen months assuming the required data sources are available on schedule. Research on Question 5 could also be undertaken within this time period, although it would involve the collection of original data from States.

The overall objectives of such an effort would be to pull together baseline information on State eligibility policies for Medicaid and to better understand the relationship between State eligibility decisions and Medicaid program costs.

Methodology

The first step in performing the eligibility research needed would be to ensure that basic State program characteristics data related to eligibility are complete and in a usable format for the period 1980 to the present. It is necessary to have a reliable data base on State eligibility policies over a two and one half year period in order to analyze various statistical information on program utilization and expenditures later in the study. The Program Characteristics Study should be able to provide accurate state policy data for February 1982. The NGA and IGHP reports should be used to attempt to establish a pre-1982 baseline. This latter step may be difficult because the NGA and IGHP data bases are not designed for this purpose. Nevertheless, they appear to have enough information to make this feasible. Other sources such as the Commerce Clearing House Medicaid and Medicare Guide and previous HCFA eligibility studies may be useful supplements.

Since there are numerous characteristics data related to eligibility, a second step would involve analysis of the information to determine which policy variables reflect the most critical differences between States and to compile these data in a way which could be readily understood and used by policymakers and their staff (as well as researchers). A concise and well-organized presentation of eligibility practices among States for Medicaid would be extremely useful. This study product should be disseminated as soon as it is ready.

The next step would be to analyze from the characteristics data and HCFA 120/2082 data the impact of the Reconciliation Act eligibility provisions. An assessment should be made of which the Act's eligibility provisions States have chosen to use. It might be useful to undertake a brief telephone survey to selected States to determine why certain options were selected. Such a survey might also be performed if it appears little use has been made of the new eligibility options, with the objective of finding out why States are not using them.

The HCFA 120/2082 data should then be reviewed for the periods before and after the OBRA changes to see if anticipated decreases in enrollment and expenditures have occurred. At least three months lag time should be allowed for the changes to become effective.

This analysis should lead to an assessment of how successful the OBRA changes for eligibility have been. How many cases have been cut back as a result of which policy changes? What have been the savings? Of course, these calculations will have to take account of other program changes which may be impacting enrollment and cost, as well as program trends.

Concurrent with the above steps, analysis can be underway to answer Evaluation Questions 3 and 4 -- what relationships exist between eligibility policy options and program costs. As a start, HCFA 120/2082 data can be used to look at patterns of enrollment,

utilization and expenditures for the broad groups of Medicaid eligibles captured in those reports. Analysis should show if there are consistent relationships between groups. For example, do the medically needy always cost more per capita than the categorically needy? Do consistent ratios of enrollment, utilization and/or cost between various groups appear to exist? Program characteristics information will have to be used in this analysis to control for differences in benefits and breadth of group coverage among States.

Analysis should also be done of HCFA 120/2082 data to assess what differences in enrollment, utilization and costs appear to result from the various SSI-related options States have for Medicaid. As part of this analysis, regularly published SSI statistics should be utilized to determine Medicaid participation rates for SSI recipients in States not automatically extending Medicaid eligibility.

In addition, the 120/2082 data should be used to analyze the extent to which broad eligibility policy changes by States, such as income level changes or changes in group coverage, are correlated with changes in rates of enrollment, utilization and costs. Such analysis would be complicated because of the complexity of the program and the many other changes occurring simultaneously, but it would be worth a small investment of resources.

Since the 120/2082 data are not sufficient to answer all eligibility questions because they are aggregate and limited in detail, the Tape-to-Tape and the MQC data should be analyzed to assess more precisely the impact of various eligibility policies. Because these data sources are person-based and have more detailed eligibility variables than the 120/2082 reports, considerably more analysis could be done. Cross-tabulations could be undertaken to look at narrow eligibility groups, recipients with different income levels, recipients with assets, working recipients, recipients in different living arrangements, and recipients by length of eligibility to see what utilization and cost patterns result from related policy decisions. The Tape-to-Tape data could be used to

provide good estimates of expenditures. The MQC data are useful because they are nationwide and they have just about every imaginable eligibility variable.

From the analysis done with the 120/2082 data and the Tape-to-Tape and MQC data, attempts should be made to arrive at generalizations or conclusions useful to both Federal and State policymakers with regard to the cost effects of various eligibility policy decisions. This step is essential to help policymakers understand what the cost (or savings) are likely to be when they decide to change eligibility provisions. It cannot be emphasized enough how critical it is that such conclusions be attempted. A useful study product would summarize what has been learned about the Medicaid cost effects of various eligibility decisions, such as raising income levels or expanding coverage to include a medically needy program. This study product should be distributed as soon as it is available.

As a final step, information should be collected to assist policymakers in better understanding what public health coverage is provided at the State and local level to poor people not eligible for Medicaid. Many States have general assistance medical programs, for example. Public general hospitals also are a common source of health care for the indigent. For each State, it would be helpful to know the level of funding, the source of funding, the eligibility requirements, the benefit limitations, and the rates of enrollment and utilization for any public health programs in operation.

Such information is not currently available. It could be gathered through a telephone/mail survey of States.* It would have to be a somewhat iterative process since it is unlikely that all the needed information would be available from one source.

*Reportedly, ASPE is currently considering a telephone survey of State general assistance programs. These data needs could potentially be integrated into the ASPE project.

It would also be worthwhile to inquire as part of the survey whether any information is available on what happened to Medicaid recipients made ineligible by Reconciliation Act changes. If such statistics have not been kept (which seems likely in most States), program officials may at least be able to comment on the likelihood of coverage through general assistance, public hospitals, or other health care sources.

A report documenting the survey results should be released as soon as possible. It should include analysis of the differences among States in their public health programs for the non-Medicaid poor. It should also attempt to estimate aggregate State and local expenditures for the programs.

In addition or as a more limited option, NMCUES data could be analyzed for information on State-only health care programs. The NMCUES data should include utilization and expenditure information for state-only programs for 3 of the 4 State Medicaid samples. It could be used to support state-specific analysis and estimates of who uses State-only programs and what the extent of State-only coverage appears to be.

Problems

As with other recommended study design options, the eligibility-related analysis faces problems of confounding influences as attempts are made to isolate the effects of eligibility changes on program statistics. Problems will also arise if the Program Characteristics, Tape-to-Tape, and MQC data bases are not as comprehensive as planned, or if they fall behind schedule. Certainly problems will be faced in constructing a comprehensive pre and post OBRA report on State eligibility program characteristics. However, these obstacles should not be insurmountable and it seems highly feasible that the recommended methodology could be accomplished.

4.6.5 Long Term Study Options

No recommendations are made regarding long-term study options for eligibility.

4.7 Institutionalized Recipients

4.7.1 Utility of Research in this Area

Because over 40% of the Medicaid budget is spent on long term care institutional services, Federal policymakers are interested in better understanding the group of Medicaid enrollees receiving this care. Although the costs of institutional care are high, only a relatively small proportion (6%) of the Medicaid caseload is involved. Numerous policy decisions relate to the institutionalized -- for example, what to do about home and community-based care, where to set eligibility criteria, and how to establish family responsibility provisions -- but little information is available on their personal characteristics and overall health care utilization patterns. Thus, decisions often have to be made without knowing what the likely effects will be in terms of number of recipients involved and the anticipated budget impact.

4.7.2 Evaluation Questions

Two primary questions have been designed to elicit the basic descriptive information needed on the institutionalized. The first question focuses on defining who the institutionalized are and how they vary across states.

1. Who are the institutionalized? What categories and eligibility groups do they fall into? How long have they been eligible for Medicaid? Were they eligible before institutionalization? What are their income sources and amounts? What assets do they have? What are their family situations? How many have spouses or adult children who might potentially contribute toward their care? How do characteristics vary by state?

Question 2 requests analysis of their overall health care utilization and cost patterns. In the past, most study has focused on only the costs of institutional care per se. Little is known about the extent to which the institutionalized use physicians, drugs, and other Medicaid services. Such data would be helpful to better understand the entire cost to Medicaid of long term care recipients.

2. How do the cost and utilization patterns of the institutionalized differ from other Medicaid recipients? Analyze by service and include the full costs of Medicaid for the institutionalized (i.e., include drugs, physician fees, etc.) What are results controlling for type of institutional care, age, sex and category of eligibility? How do the patterns vary by state? What effects do state limits on amount, duration, and scope of services appear to have on such patterns?

4.7.3 Assessment of Data Sources

The information needed to address changes or alternatives for the institutionalized, and the data needed to construct them, fall generally into three categories:

- Statistical data on the personal characteristics of the institutionalized population
- Statistical data on utilization and expenditure patterns of institutionalized and comparable, non-institutionalized populations.
- Data on the amount, duration and scope of Medicaid benefits by state to use to control for exogenous factors

Exhibit 11 which follows identifies the specific data required in all three categories and assesses potential data sources.

Based on the analysis in Exhibit 11, the following general observations can be made concerning the availability of data to respond to the evaluation questions of interest:

- Information on the Personal Characteristics of the Institutionalized Population is partially available from two data sources -- Tape to Tape and MQC. Neither of these sources contains needed information on the families and potentially responsible relatives of the institutionalized. Tape-to-Tape has been chosen as the preferred data source because of its sample size and its ability to link personal data to longitudinal claims information.
- Information on Utilization and Expenditure Patterns for the Institutionalized and Non-Institutionalized is available from the same two sources. Again, Tape to Tape is the preferred data base because it has longitudinal claims data over a two year period.
- Information on State Medicaid Benefits is readily available from the Program Characteristics Study. Other sources contain only some of the needed data.

Exhibit 11

ASSESSMENT OF DATA SOURCES FOR THE INSTITUTIONALIZED

STATISTICAL DATA

Indicators	Component	Potential Sources	Strengths	Weaknesses	Availability	Preferred Source (s)
Characteristics of Institutionalized Medicaid eligibles	For Institutionalized Medicaid eligibles:	A. Tape-to-Tape	1. Person-based unit records. 2. Reliable data taken from State eligibility and claims files. 3. Also has detailed claims data for two year period. 4. Includes institutionalized and non-institutionalized.	1. Covers 5 States for only 2 years (1980-1981) at present. 2. May not be expanded or continued. 3. Contains no information on responsive relatives and only limited data on income and assets.	1. 1980-81 data in 1983. Subsequent availability based on level of funding.	X (For limited State-level descriptions)
- Demographic	- Age - Sex - Personal income - Assets - Types of institutional care - Eligibility category - Period of eligibility - Period of institutionalization - Living arrangements prior to institutionalization - Existence of responsive relatives - Income of relatives					
- Economic						
- Eligibility						
- Familial						
		B. MQC	1. Case and person based. 2. Very reliable data. 3. For most States, links these descriptive items to utilization and expenditure data. 4. Contains data on third party liability. 5. Spend-down information. 6. Cross-program information. 7. Includes both institutionalized and non-institutionalized. 8. Includes every State and Territory.	1. Sample sizes too small to analyze institutionalized sub-samples at the State level 2. Data elements that are not specific to the reference month (e.g., periods of eligibility, periods of institutionalization, and prior living arrangements) are not available. Limited data are available on potentially responsible relatives. 4. Claims data are only for one month period.	1. 6 months after close of semi-annual periods.	X (For some detailed regional or national estimates only)

Exhibit 11
(continued)

STATISTICAL DATA

Indicators	Component	Potential Sources	Strengths	Weaknesses	Availability	Preferred Source (s)
Per capita utilization and per capita expenditures within eligibility group	For institutionalized Medicaid eligibles by type of institutional care	A. HCFA 120 (monthly) HCFA 2082 (annually)	1. Data are State-specific. 2. Monthly, quarterly and annual totals.	1. Timeliness, accuracy, and completeness have been problems in past; currently improving.	1. 2082 - Ongoing. Hard copy available after close of Federal FY; tapes and published data considerably later.	
- For institutionalized eligibles by type of institutional care	- Number of eligibles per group - Utilization statistic by eligibility group		3. Comprehensive; available for most States and most time periods.	2. Can identify only SNF/ICF services and expenditures to institutionalized.	2. 120 - Ongoing. Hard copy available one month after reporting period. Currently 15-month lag in computerizing data.	
- For non-institutionalized eligibles comparable in:	- Expenditures by eligibility group - Age, sex, and disability distribution for above measures			3. Cannot provide data on medically needy population for periods prior to FY 80.		
- age				4. Cannot disaggregate services to non-institutionalized.		
- sex	For non-institutionalized Medicaid eligibles, within age, sex, category groupings:			5. Data, except for eligibility data, are all for month or year of payment, not service.		
- category	- Number of eligibles - Utilization statistic - Expenditures			6. No eligibility counts are available on the annual data (2082). 7. Data available only for highly aggregated eligibility categories.		

Exhibit 11
(continued)

STATISTICAL DATA

Indicators	Components	Potential Sources	Strengths	Weaknesses	Availability	Preferred Source(s)
	B. Tape to Tape		<ol style="list-style-type: none"> 1. Person-based unit records. 2. Reliable data taken from State paid claims tapes. 3. Provides utilization and expenditure data on all services. 4. Provides data on all eligibility groups. 5. Age, sex, category and type of care distributions available. 6. Permits identification of institutionalized vs. non-institutionalized eligibles. 	<ol style="list-style-type: none"> 1. Five State, two year data base (FY80-81) at present. 2. May not be expanded or continued. 	<ol style="list-style-type: none"> 1. 1980-81 data in 1983. Subsequent availability based on level of funding. 	<ol style="list-style-type: none"> X <p>(For analyses at a State level in a few States)</p>
	C. INCUES		<ol style="list-style-type: none"> 1. Person-based data. 2. Combines self-report with eligibility/claims records. 3. Identifies Medicaid plus out-of-pocket and other 3rd party payments. 4. Most complete data set on non-institutionalized. 	<ol style="list-style-type: none"> 1. National data plus 4 State Medicaid sample. 2. One year only (1980). 3. May not be repeated. 4. Excludes services to institutionalized persons. 5. Subsample of disabled individuals too small to analyze. 	<ol style="list-style-type: none"> 1. 1980 data in 1983. 	

STATISTICAL DATA

Indicators	Component	Potential Sources	Strengths	Weaknesses	Availability	Preferred Source(s)
					1. 6 months after close of semi-annual periods.	X (For regional or national estimates only)
	D. MQC		<ol style="list-style-type: none"> 1. Case and person-based. 2. Very reliable data. 3. For most States, links utilization and expenditure data to eligibility items. 4. Can distinguish institutionalized from non-institutionalized eligibles. 5. Permits age, sex category and type of care adjustments. 	<ol style="list-style-type: none"> 1. Sample size too small to analyze institutionalized sub-samples at the State level. 2. Excludes retro-active eligibles, who may constitute an important subgroup of the institutionalized. 3. Some States have separate eligibility versus utilization/expenditure subsamples. 4. Contains claims data only if claim processed within 4 months. Also only one month of claims data per case. 		
	E. Long-Term Care Survey		<ol style="list-style-type: none"> 1. Detailed data on non-institutionalized Medicare/Medicaid eligibles. 2. Large sample sizes of disabled. 3. Age, sex, and category data available. 	<ol style="list-style-type: none"> 1. Limited to over 65 Medicaid eligibles. 2. Excludes institutionalized. 3. Cross-sectional interview data only. 	1. 1982 data available in 1983.	
	F. Home & Community Based Waiver Monitoring System		<ol style="list-style-type: none"> 1. State-specific data. 2. Distinguishes expenditures for institutionalized and non-institutionalized groups. 3. Waiver/non-waiver distinction in proxy for disability control. 	<ol style="list-style-type: none"> 1. Limited to States with waivers. 2. Eligibility only at gross levels. 3. Data quality unknown. 4. No ability to make age, sex, category or type of care adjustments. 	1. Annually during term of waiver. First reports not available before 1982 or early 1983.	

Exhibit 11
(continued)

EXOGENOUS VARIABLES

Indicators	Component	Potential Sources	Strengths	Weaknesses	Availability	Preferred Source(s)
Medicaid program characteristics by State - Benefits covered - Benefit limits - Eligibility categories covered		A. Program Characteristics Data	1. Provides data on a State-by-State basis. 2. Computerized.	1. May be discontinued.	1. Will provide data for February 1982 and possibly prospectively.	X
		B. Data Systems maintained by NGA and IGHP	1. Provides State-level data. 2. Updated on a regular basis. 3. Most complete source prior to February 1982.	1. No baseline data. 2. Less reliable and complete than A. 3. May be discontinued.	1. NGA data cover July 1978-1981. Quarterly update planned. 2. IGHP data cover 1981 proposed changes. Update schedule unclear.	(As needed retrospectively to augment A)

As a result, it appears most of Question 1 (who are the institutionalized) and all of Question 2 (what are their utilization and expenditure patterns) can be answered for a few key states, and this analysis could be accomplished in the next 18 months. However, available sources do not permit analysis for part of Question 1 -- information on the ability of relatives to contribute toward the cost of care for the institutionalized. This information would require an original data collection effort.

4.7.4 Short-term Study Options

Much of the needed analysis to answer Evaluation Question 1 (personal descriptive information on the institutionalized) could be undertaken by DBS in the next eighteen months with soon-to-be available Tape-to-Tape data. The second question (identification of overall Medicaid utilization and costs for the institutionalized) could be addressed in full by the same data source. Thus, in the next eighteen months, DBS could make substantial progress toward better informing Federal policymakers about the personal characteristics of the institutionalized and their Medicaid utilization patterns. Although the Tape-to-Tape data cover only a few States, these States incur a large portion of total national expenditures for long-term care.

Methodology

The Tape-to-Tape data offer significant potential for studying the institutionalized in at least a few States. Because these data are person-based and are fairly detailed, they can be used to address the questions raised as soon as they are available. The methodology would basically involve identifying the institutionalized population in the data base and then analyzing all available information on their personal characteristics. Cross-tabulations would be the primary form of analysis. The Tape-to-Tape data should be able to indicate the groups and categories the institutionalized fall into, the length of their

eligibility for Medicaid and whether they were eligible before institutionalization. Other descriptive variables, including age, sex and type of institutional care could also be used to further study their characteristics. In at least one State, data will be available on income levels and assets of the institutional population. No data (except marital status) will be available on family structure, the presence of adult children, or the potential ability of adult children to contribute to the cost of institutional care. At this point, only a special survey would provide this information related to families of the institutionalized.

The Tape-to-Tape data would also enable an analysis to be undertaken comparing the Medicaid costs of the institutionalized with the non-institutionalized for a two-year period. It would permit all Medicaid costs to be considered, not just the costs of institutional care. Cross tabulation should be used to look at utilization patterns by service, with controls for age, sex, category, and type of institutional care. Distributional analysis should also be undertaken. Information on State program characteristics should be utilized to understand differences between States in amount, duration and scope of services extended to the Medicaid population. These data should be considered in the analysis of differences in utilization and cost patterns between States to see what effect such limitations appear to have on the institutionalized.

Problems

Several problems with the proposed methodology can be identified. Of concern is the fact that the Tape-to-Tape data will only cover a few States to start with, thus limiting the ability of DBS to generalize from study results. It also hurts that the Tape-to-Tape data base does not include person-based Medicare claims data. Since the vast majority of the institutionalized are likely to be eligible for Medicare, it is unfortunate that these costs cannot be included in the analysis. In the discussion of Dual

Entitlees (pages 142 - 148), a recommendation is included for the long-term evaluation to expand the Tape-to-Tape data base to include Medicare claims information.

Probably most serious, however, is the fact that the proposed study will not be able to provide information on the family resources potentially available to the institutionalized. With growing interest in changing policies regarding family responsibility, background information to assist in assessing the potential impact of such changes would be useful. In the discussion of Relative Responsibility (pages 114 to 118), a recommendation is included to study potentially responsible relatives of the institutionalized. If such an effort were undertaken, these results would be especially useful for policy development for the institutionalized.

4.7.5 Long-Term Study Options

No recommendations are made regarding long-term study options for analysis of descriptive information on the institutionalized.

4.8 Dual Entitlees

4.8.1 Utility of Research in this Area

A continuing and fundamental issue for Congressional and Administrative policymakers in future years is how the overall health care needs of the growing elderly and disabled populations will be met. An important decision with regard to this issue is:

- Should the relationship between Medicaid and Medicare be continued for those persons served by both programs (dual entitlees)?

If it appears that the interaction of the two programs for dual entitlees encourages overutilization and/or other unnecessary costs, there will be interest in redefining the relationship. Redefinition may also be prompted by other proposals, such as health care vouchers or per capita plans (HMO enrollment) for the elderly; means-testing Medicare; increased deductibles, coinsurance and premiums for Medicare; and elimination of the Federal match for State Part B buy-in.

To assist them in making decisions affecting both programs, policymakers need information and analysis on the combined coverage of the two programs for the low-income elderly and disabled populations. Many people feel that the current "piece-meal" program-specific information and analysis contributes to a misperception for Federal and State costs of providing health care to these two groups. Little research is available analyzing the breakdowns between Federal and State expenditures across the two programs.

At the State level, policymakers also have concerns in this area. Better information on dual entitlees would help States assess the impact on their Medicaid programs of changes to Medicare such as eliminating Federal Financial Participation for buy-in, and increasing the size of the premiums, coinsurance, and deductibles.

Evaluation Questions

Three evaluation questions have been developed for dual entitlements. All of these questions are considered to be primary and of strong interest. All request descriptive information and analysis.

The first question is designed to analyze the cost of Medicare buy-in to States for dual entitlements.

1. Do per capita costs of Medicare for dual entitlements (i.e. the total of premiums, coinsurance and deductibles), vary among States? What portion of overall expenditures for dual entitlements do the Medicare buy-in costs to States represent?

Question 2 requests overall information on the health care costs of dual entitlements and how these costs are financed. It also calls for service-specific analysis.

2. What are the service-specific and aggregate health care costs of dual entitlements, i.e., what are Medicare, Medicaid, commercial insurance and other third party, and out-of-pocket expenditures combined? What percentage of expenditures does each payment source represent by service? What differences are seen by State?

Question 3 represents an initial review of the utilization patterns of dual entitlements compared to persons without Medicaid or Medicare coverage.

3. What are the utilization patterns of dual entitlements, adjusted by age and State Medicaid benefit packages? How do they compare with Medicare-only and Medicaid-only recipients, especially for those services which are covered by both programs?

4.8.3 Assessment of Data Sources

The significant indicators for analysis of the dual entitlement group fall into two categories:

- Data on the costs of Medicare premiums, coinsurance and deductibles to States for dual entitlements.
- Data on the utilization and expenditure patterns of dual entitlements in comparison to single program entitlements.

Exhibit 12 identifies the the specific data required in both categories and assesses potential data sources.

Based on the analysis shown in Exhibit 12, the following general observations can be made concerning the availability of data to respond to the evaluation questions of interest:

- Information on the costs of Medicare to States for dual entitlements is available from the HCFA 120/2082 data base.
- Information on utilization and health care costs of dual entitlements and comparison groups except for the institutionalized will be available from the NMCUES data base.

These observations indicate that analysis to address Evaluation Question 1 (the cost of Medicare to States) is totally feasible within the next 18 months. Questions 2 and 3 (the utilization and expenditure patterns of dual entitlements) can be partially addressed by the NMCUES data bases in the short-term. However, the omission of institutionalized dual entitlements from the NMCUES data base suggests that full analysis of Questions 2 and 3 can only be undertaken in the longer term and only if a data base such as Tape-to-Tape is expanded to include detailed and reliable Medicare claims data.

4.8.4 Short-term Study Options

Analysis to partially address the three evaluation questions on dual entitlements can be undertaken by DBS within the next eighteen months, using the HCFA 120/2082 and NMCUES data bases. However, the limitations of the NMCUES data base are a substantial constraint, as will be discussed in the problem section.

Methodology

To begin with, analysis should be done using the HCFA 120/2082 data to assess differences between States in Medicare enrollment and buy-in costs. Simple descriptive information should be compiled depicting State decisions on buy-in (a few States have chosen not to

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exercise their buy-in option) and the costs per State (including premiums, coinsurance and deductibles) of buy-in for the aged and disabled. Costs should be adjusted to a per capita basis. Data should also be compiled which show the cost of Medicare buy-in relative to the overall costs of Medicare for the aged and disabled by State. Again, a per capita calculation should be used. These tabulations should provide the information needed for evaluation of Question 1.

The NMCUES data should be the primary source of analysis on utilization and cost patterns for dual entitlements (Evaluation Questions 2 and 3) since it is the only source which includes person-based Medicaid and Medicare claims data. However, this analysis will be of only limited value since NMCUES excludes the institutionalized and only covers 4000 Medicaid cases across four States (only a portion of which will be dual entitlements).

To begin with, the NMCUES data should be used to look at overall health care costs for dual entitlements and to disaggregate these costs by service and by source of payment (including out-of-pocket expenses and expenses covered by other financing sources). Both a calculation of average costs and distributional analysis should be undertaken. Cross-tabulation controlling for age, sex and health status would also be of interest to better understand how the overall health costs of dual entitlements are composed.

The NMCUES data can also be used for some State comparative analysis. Since all the NMCUES States automatically buy-in to Medicare for Medicaid recipients, it will not be possible to compare buy-in and non-buy-in States. However, the four NMCUES States can be compared to see if dual entitlements appear to have similar utilization and cost patterns, when controls for age, sex and health status are imposed. This analysis should show whether utilization and cost appear to be fairly uniform across States. Differences in State benefit packages should be taken into account in analyzing the data.

The NMCUES data can be used to compare dual entitlements with Medicare-only recipients of the same age, sex and health status. The analysis should show whether utilization by service differs if Medicaid coverage is also present.

Since some disability Medicaid cases are likely to be ineligible for Medicare (a two year waiting period is required), a comparison can also be done of disabled dual entitlements with Medicaid-only disabled cases. Cross-tabulations of the service utilization and cost patterns of these should show the effect of Medicare coverage on health care costs.

Problems

The major problems with the proposed study design have already been mentioned. The NMCUES survey covers only a small sample of cases in four States, thus limiting the extent to which overall conclusions can be drawn from study results. Of equal importance, the NMCUES survey excluded the institutionalized. Medicaid coverage of the institutional care services is a major difference from the Medicare benefit package, and institutional care is extremely costly. Thus, for the group of dual entitlements who receive the most expensive Medicaid care, the NMCUES data are useless.

These concerns over the limitations of the short-term study options for dual entitlements are substantial, thus influencing the recommendations which follow for long-term study of dual entitlements.

4.8.5 Long-term Study Options

The Tape-to-Tape data would be a rich source for the study of dual entitlements if detailed Medicare claims were included. Although some thought has been given to attempting to retrieve detailed and reliable Medicare data, at the present this option is not being exercised. Only the limited and unreliable Medicare information available on State MMIS files is being collected. Linking Tape-to-Tape data directly to Medicare claims files should not be a difficult task since Social Security and Medicare claim numbers are

part of the Tape-to-Tape data base for each Medicaid recipient. One barrier to collecting the Medicare data is resource availability. Apparently there is also an issue of privacy and confidentiality with the Tape-to-Tape data, possibly preventing it from being used to link to other data sources. Nevertheless, Medicare data were retrieved for the NMCUES study, so that there may be a way to surmount this barrier.

Given the interest in the dual entitlee issue, DBS should strongly consider adding the Medicare data to the Tape-to-Tape data base. Because the Tape-to-Tape project includes the institutionalized and the entire universe of Medicaid recipients for its study States, it seems worthwhile to pursue this final step to make it a truly exhaustive data source.

If Medicare data were retrieved for Tape-to-Tape, it would probably be 1983 before the dual entitlee analysis could begin. The methodology to be used would be similar to that proposed for the NMCUES data in the short-term option. The difference would be that the problems of small sample size and lack of an institutional sample would be eliminated.

4.9 Distributional Analysis of Medicaid Utilization and Expenditures

4.9.1 Utility of Research in this Area

To date, most Medicaid initiatives, including cost-saving initiatives related to benefits, have been applied to the entire population; however, because various components of the Medicaid service populations have very different utilization patterns, this approach tends to benefit some and punish others. With better data becoming available on utilization patterns of individuals and groups and with increasing fiscal pressures, there is a growing interest in designing benefit packages more suited to particular populations. The goal is to define benefits and to set benefit limits to reduce inappropriate utilization and to begin to identify and review the overutilizers in each major peer group.

The 1981 OBRA opened for the first time the possibility of targeting services to specific populations, within some fairly severe constraints. The Federal level policy decisions on allowing further targeting have yet to be made. They are the following:

- Should the mandatory benefit package under Medicaid be redefined so that States have further discretion in the services offered?
- Even within the mandatory benefit package, should States be able to set different limits on amount duration and scope for different populations?
- How should the population groups for which benefit and amount duration and scope vary be defined?
- Should the Federal government have set any limits on how benefits can vary?

At the State level, decisions focus more concretely on how to design service and benefit limits packages that will achieve the goals of more effective utilization without being punitive.

Decisions at the State level include:

- How should service packages vary for various populations? What criteria and analysis should be used to make this decision?

- How should benefit limits vary? What criteria and mechanisms should be used to identify possible over-utilizers?

4.9.2 Evaluation Questions

The input required for these decisions consists of: analysis of available data on utilization patterns of various groups, information on the distribution of use across given populations, information on the reaction of the States to the options contained in the OBRA, and information on the unmet needs of the Medicaid population. Four evaluation questions have been developed to guide data analysis. Three of these have been classed as Primary Questions and one has been classed as a Secondary Question.

Primary Questions

The first question is aimed both at establishing a baseline for further analysis and at evaluating the State response to the options offered by the OBRA.

1. What are current service packages by State? How do they vary by group? What has the recent history of service packages been? What changes occurred as a result of the 1981 OBRA?

The next questions are aimed at identifying the different utilization and expenditure patterns of various groups. This information is key to designing service packages and benefit limits which are linked to the actual needs of a group.

Question 2 requests an examination of the overall pattern of particular groups. The analysis will identify for each group which services are most heavily utilized and what average utilization rates are.

2. What are the Medicaid utilization and expenditure patterns of various eligibility and age groups by State (controlling for service package and benefit limits)? Are there consistent differences between eligibility and age groups?

Question 3 requests a finer examination of the patterns of each particular group. The focus should be on distributional analysis -- describing how consistent utilization and expenditure patterns are within the group. The goal is to determine whether the average utilization and expenditure numbers are in fact representative of an individual's experience or if they have been skewed by a group of high or low utilizers within the group. In other words, how closely does the distribution pattern approach a normal curve? This has important implications for the design of service packages and benefit limits. If the average utilization is skewed by a group of heavy utilizers, setting a review point at the standard deviation above the mean will limit review only to heavy utilizers, who may represent the sickest population. Distributional analysis is required to allow review points and benefit limits to be set at their most efficient levels.

3. For each of these groups, analyze, by service, the distribution of Medicaid utilization and expenditures across the group. Define the mean, mode, median, and dispersion of per capita utilization and expenditures. Are there identifiable groups which consume a disproportionately high or low amount of services? Describe the high and low utilizers in terms of personal characteristics, length of time on program, and primary site of ambulatory care. Are there significant differences between high, low, and average utilizers on any of these dimensions?

Secondary Questions

A fourth question is aimed at identifying those services which are used by Medicaid recipients but not covered by Medicaid.

4. Identify the amount of non-covered care received by Medicaid recipients and identify the source of payment and approximate cost of that care, analyzing the costs by eligibility category, age group, and diagnosis or functional status.

States may wish to consider such information in designing service packages, particularly in light of their goal of maximizing Federal revenues. In many cases, States have conferred Medicaid provider status to State funded programs as a way to increase Federal revenues.

4.9.3 Assessment of Data Sources

There are two general types of data required: descriptive data and data required to construct the indicators significant to the analysis of targeted programs.

The specific types of data required are:

- Descriptive data on State service packages.
- Statistical data on utilization rates by group and service.
- Statistical data on expenditure rates by group and service.
- Statistical data on the characteristics of high and low utilizers.

Exhibit 13 identifies the specific data required, identifies and assesses potential data sources, and indicates available and preferred data sources.

Based on the analysis in Exhibit 13, the following general observations can be made concerning the availability of data to respond to the evaluation questions of interest:

- Information on the Benefit Packages available to different groups of Medicaid eligibles is potentially available from a variety of sources. Program Characteristics is the data base of choice.
- Information on the Characteristics of High and Low Utilizers will be available from three projects in the developmental stage -- Tape-to-Tape, MQC, and the Long-term Care Survey. Tape-to-Tape is the preferred data base.
- Information on Medicaid Enrollment, and Utilization and Expenditures for Covered Services on a fairly gross level is available from the HCFA 120/2082 data base. To obtain any detailed data requires use of the Tape-to-Tape data base.

ASSESSMENT OF DATA SOURCES FOR DISTRIBUTIONAL ANALYSIS OF UTILIZATION AND EXPENDITURES

DESCRIPTIVE DATA

General Category	Components	Potential Sources	Strengths	Weaknesses	Availability	Preferred Source(s)
State service packages by eligibility group	For each eligibility group - Benefits covered - Benefit limits - Co-payments	A. Program Characteristics Data	1. Provides data on a State-by-State basis. 2. Computerized.	1. May be discontinued.	1. Will provide data for February 1982 and possibly prospectively.	X
		B. Data Systems maintained by NGA and IGHP	1. Provides State-level data. 2. Updated on a regular basis. 3. Most complete source prior to February 1982.	1. No baseline data. 2. Less reliable and complete than A. 3. May be discontinued.	1. NGA data cover July 1978-July 1981. Quarterly update planned. 2. IGHP data cover 1981 proposed changes.	(As needed, retrospectively to augment A)

Exhibit 13
(continued)

DESCRIPTIVE DATA

Indicators	Components	Potential Sources	Strengths	Weaknesses	Availability	Preferred Source (s)
Characteristics of high/low utilizers - by eligibility category - by service	For top/bottom quartile and decile users for each major service type within eligibility group: - Age - Sex - Disability status - Health status - Living arrangement - Length of eligibility for program - Primary source of ambulatory care	A. Tape-to-Tape	1. Person-based unit records. 2. Reliable data taken from State eligibility and claims files. 3. Contains data on age, sex, categories and periods of eligibility. 4. Provides data at detailed level for services and eligibility groups. 5. Includes institutionalized and non-institutionalized.	1. Covers only 5 States for 2 years (1980-81) at present. 2. May not be expanded or continued. 3. Contains no data on disability health, status, living arrangements or primary source of ambulatory care.	1. 1980-81 data in 1983. Subsequent availability based on level of funding.	X (For limited state-level descriptions)
		B. MQC	1. Case and person based. 2. Very reliable data. 3. Contains data for reference month on all items except disability, health status, and primary source of care. 4. For most States links these descriptive items to utilization and expenditure data. 5. Cross-program data. 6. Includes both institutionalized and non-institutionalized.	1. Sample sizes too small for sub-state analyses by eligibility or service categories. 2. Data elements that are not specific to the reference month (e.g., length of eligibility, and prior living arrangements) are not available. 3. Some States have separate eligibility versus utilization/expenditure subsamples.	1. Six months after close of semi-annual periods.	X (For more detailed regional or national estimate only)

Exhibit 13
(continued)

DESCRIPTIVE DATA

Indicators	Components	Potential Sources	Strengths	Weaknesses	Availability	Preferred Source(s)
	C. NMCUES		<ol style="list-style-type: none"> 1. Person-based data. 2. Data on all factors. 3. Accurate data due to verification with administrative records. 4. Identifies detailed service and eligibility categories. 	<ol style="list-style-type: none"> 1. National sample plus 4 State-specific Medicaid samples for only 1 year. (1980). 2. May not be repeated. 3. Excludes institutionalized. 4. Detailed eligibility categories samples too small to analyze at State level. 5. Groups of disabled too small to analyze disability status. 	<ol style="list-style-type: none"> 1. 1980 data in 1983. 2. Preliminary data in 1982. 	
	D. Survey of Impaired Individuals		<ol style="list-style-type: none"> 1. Detailed data non-institutionalized Medicare/Medicaid eligibles. 2. Large sample sizes of disabled. 3. All data elements are available. 	<ol style="list-style-type: none"> 1. Limited to over 65 Medicare eligibles. 2. Excludes institutionalized. 3. One time only. 4. Non-national data only. 	<ol style="list-style-type: none"> 1. 1982 data in 1983. 	<p>X</p> <p>(Best opportunity to study non-institutionalized disabled)</p>

Exhibit 13
(continued)

STATISTICAL DATA

Indicators	Components	Potential Sources	Strengths	Weaknesses	Availability	Preferred Source(s)
For each eligibility category covered:	Number of eligibles by group	A. HCFA 120 (monthly) HCFA 2082 (annually)	1. Data are State-specific. 2. Monthly, quarterly and annual totals. 3. Comprehensive: almost all States for almost all time periods.	1. Timeliness, accuracy, and completeness have been problems in past; currently improving. 2. Cannot provide data on medically needy population for periods prior to FY 80. 3. Data, except for eligibility data, are all for a month or year of payment, not service. 4. No eligibility counts are available on the annual data. 5. Data available only for highly aggregated categories. 6. Cannot disaggregate eligibility or service categories on basis of groups excluded from coverage.	1. 2082 - Ongoing. Hard copy available after close of Federal FY; tapes and published data considerably later. 2. 120 - On-going. Hard copy available one month after reporting period. Currently 15-month lag in computerizing data.	X (For per capita utilization and expenditure data on certain gross categories of eligibility)
For each service covered for each eligibility category:	Utilization statistics by service and eligibility group					
- enrollment						
- per capita utilization	Expenditures by service and eligibility group					
- per capita expenditures	Expenditures by service and eligibility group					
		B. Tape to Tape	1. Person based unit records. 2. Reliable data taken from State paid claims tapes. 3. Provides utilization and expenditure data on all services. 4. Provides data on all eligibility groups. 5. Includes institutionalized and non-institutionalized.	1. Five state, two year data base (FY 80-81) at present. 2. May not be expanded or continued.	1. 1980-81 data in 1983. Subsequent availability based on level of funding.	X (For utilization and expenditure data for more specific eligibility categories than those covered in HCFA 120 and 2082)

Exhibit 13
(continued)

STATISTICAL DATA

Indicators	Components	Potential Sources	Strengths	Weaknesses	Availability	Preferred Source(s)
		C. NMCUES	<ol style="list-style-type: none"> 1. Person-based data. 2. Combines self-report with eligibility/claims records. 3. Identifies Medicaid plus out-of-pocket and other 3rd party payments. 4. Identifies detailed eligibility categories for 4 State sample. 	<ol style="list-style-type: none"> 1. National data plus 4 state Medicaid sample. 2. One year only (1980). 3. May not be repeated. 4. Excludes institutional persons. 5. Individual detail eligibility category samples too small to analyze at State-level. 	<ol style="list-style-type: none"> 1. 1980 data in 1983 2. Preliminary data in 1982. 	
		D. MQC	<ol style="list-style-type: none"> 1. Case and person-based. 2. Very reliable data. 3. Contains detailed eligibility data. 4. Contains data on 3rd party liability. 	<ol style="list-style-type: none"> 1. Sample sizes too small for any sub-state analysis. 2. Sampling procedures vary across states. 3. A number of states have separate samples for eligibility verification and expenditures. 5. Excludes retroactive eligibles (who had to be high utilizers). 6. Limited service detail available. 	<ol style="list-style-type: none"> 1. 6 months after close of semi-annual periods. 	

The implications of this for the feasibility of responding to the research and evaluation questions are as follows:

- Question 1 (historical and current service packages by State) can be answered by data from the Program Characteristics study.
- Question 2 (Medicaid utilization and expenditure patterns by group) can be answered by using HCFA 120/2082 data (for standard eligibility groups) or Tape-to-Tape data (for other eligibility groups).
- Question 3 (distribution of utilization and expenditures within and across groups) can be answered by analysis of Tape-to-Tape data.

4.9.4 Short-term Study Options

Analysis to address the three evaluation questions on targeting can be undertaken by DBS within the next 18 months, using the Program Characteristics and Tape-to-Tape data bases as described below.

Methodology

The first step in the targeting research is to determine which groups' utilization and expenditure patterns are of particular interest. At a minimum, these would include the medically needy and categorically needy components of the major eligibility groups as well as various subgroups (85+, 75-84, 65-74) within the aged population. Other ways to define groups could include urban/rural (defined by ZIP CODE), income levels, sex, and length of eligibility. The second is to select a period for analysis.

The third is to determine the service packages and benefit limitations which are in place for each group in each State for the period being studied. Using the Tape-to-Tape data base, average expenditures and utilization, aggregated and per service, should then be computed for each group, as should the percentage of eligibles receiving each service. The next step should be an analysis of the distribution of utilization across the recipient population. The purpose is to determine how accurately the average

data describes the population and whether there is disproportionate service consumption or costs associated with particular subgroups. Distribution should be studied by computing median, mode, and mean aggregate per capita utilization and costs and by constructing a frequency distribution. From these data, the distribution of use in the group can be summarized; statements can be made about the percentage of recipients in the aggregate or within a group which are high, average, or low utilizers. The percentage of recipients consuming a given percentage of services or cost can be identified; or, vice versa, the percentage of services or costs used by a given percentage of recipients can be calculated. In those States providing both NMCUES and Tape-to-Tape data, some inferences may be able to be drawn concerning total versus Medicaid-reimbursed utilization. Comparisons should be made between the utilization and cost patterns and frequency distributions of the various groups.

Care must be taken to factor in the impacts of service and benefit limitations on utilization, especially where they have changed during the period studied. For example, an absolute limit on the number of hospital days or physician visits may truncate the data at some point.

Two further steps are possible: one is to study inter-State differences in utilization patterns for specific groups (controlling for differences in service packages and benefit limits) to determine if States have significantly different experiences in serving the same group in two jurisdictions, and to attempt to explain these differences. Some of the potential causes of differences to be examined are: differences in income and cost levels, differences in the supply of medical services, differences in administrative procedures, and differences in reimbursement policies and fees.

A second research step which could be pursued is the identification of differences between high, medium, and low utilizers within a given group. This would require the use of person-level data, using items such as age, diagnosis, length of

time on assistance, use of substitute services, and living situation as independent and control variables, and utilization and cost as independent variables. This type of analysis would begin to more clearly define the subgroups within the groups traditionally used as units of analysis.

Potential Problems

This analysis is completely dependent upon the availability of person-based data, which is available through the Tape-to-Tape project and, to some extent, through the NMCUES data base. Tape-to-Tape is the preferred data source; however, in the immediate future it will include only a few States and the ability to generalize from the results of the analysis may be limited. This problem may be partially overcome by performing the analysis on a State basis for the States currently participating in the project and studying the degree of variation in cost, utilization, and distribution among these States.

As described in the Methodology section, the data will be confounded by the enormous variation between States in service packages and benefit limits. They will also be confounded by the differences in income and asset and disregard policies from State to State for what are nominally the same eligibility groups and by the effects of differences in medical resources, reimbursement policies, and administrative procedures from State to State.

4.9.5 Long-Term Study Options

No recommendations are made regarding long-term study options for distributional analysis of descriptive information on Medicaid utilization and expenditures.

4.10 Summary

The preceding sections have laid out a series of potential evaluation studies of the Medicaid program which are responsive to the needs of policymakers as they were described during the interviews conducted as part of this project.

As indicated in Chapter 1, the intent of this report was to lay out for DBS a range of short-term and long-term evaluation projects which relates to issues of concern to policymakers. It is expected that DBS staff and other HCFA and ASPE officials will formulate formal short and long-term evaluation plans based on the issues presented in this report, consideration of other priorities, and the availability of resources. These plans, once developed, should be widely disseminated and should be reviewed and updated frequently if the goal of conducting policy-related research and evaluation is to be attained. From the discussions conducted with policymakers, it is clear that the audience for such work is both large and receptive.

Appendix A

Interview Guide

Federal Level

1. What is your/your office's role with regard to the Medicaid program?
2. What are the current major Federal policy changes from your point of view?
3. What do you anticipate will be the impact of these changes?
4. What do you anticipate will be the range of state responses to these changes?
5. What issues do you see as key as in the coming years?
6. What are the Federal priorities and what are the state priorities? Can you summarize the differences?
7. What specific evaluation/research questions are you likely to be asking in developing and tracking these issues?
8. How do you use them?
9. How satisfactory are they in terms of level of detail, accuracy, timeliness, format? (source by source)
10. What sources of data do you currently use to answer such questions? (Offices, people, materials).
11. What additional types of data/analysis would be helpful?

The statements and data contained in this internal working paper are solely those of the authors and do not express any official opinion of or endorsement by the Health Care Financing Administration.

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